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ABSTRACT

This paper discusses the use and purposes of simulation in teacher preparation. The theoretical dimensions of instructional simulation and some current simulation programs for the pre- and in-service education of teachers are presented. Advantages and disadvantages of simulation are discussed as well as unresolved issues surrounding the use of this technique. A detailed description of three simulation programs is presented. They are a) Project Insite, b) Low-Cost Instructional Simulation for Teacher Education, and c) Inner-City Simulation Laboratory. (JB)

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THE UTILIZATION OF SIMULATION IN TEACHER PREPARATION

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A report prepared

by

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For

Bureau of Educational Personnel Development
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PART I

CHAPTER I

THE USE OF SIMULATION IN TEACHER PREPARATION: THE STATE-OF-THE ART

> A new and exciting training methodology has moved into the educational field. Properly designed, utilized, and evaluated, simulations will add a new dimension to programs intended to prepare educational professionals. Although much time and research will have to be devoted to these tasks, the potential is almost limitless.[1]

The above was the concluding statement made by Cruickshank and Broadbent in a recent document on the topic of simulation. These authors, Donald Cruickshank and Frank Broadbent, have done extensive research and writing in the area of the use of simulation in teacher education, and in February 1970 they contributed their abilities to the ERIC Clearinghouse in the form of a state-of-the-art paper entitled "Simulation in Preparing School Personnel."

Due to the recency and comprehensiveness of Cruickshank and Broadbent's contribution the author of the present report has drawn heavily from their report for the information which is discussed in the present chapter.

This chapter summarizes the present state-of-the-art in the development and utilization of simulation as an instructional approach in the preparation of teachers.

As it is referred to in this chapter simulation is defined and

described as

> a simulation is a representation of several variables in the same arrangement as they occur in a particular natural or artificial system. Once such arrangements or conditions are established, the resultant display can be seen as a model of reality which may be amendable to interaction and manipulation. [2]

Using this as an operational definition, the following aspects concerning the utilization of simulation in teacher preparation are discussed below: 1) the purposes for which instructional simulation is being used in professional education; 2) the theoretical dimensions of instructional simulations; 3) present simulation programs for the pre-service or in-service preparation of teachers; 4) issues to be resolved; 5) the advantages of simulation; 6) the disadvantages of simulation; and 7) questions in need of research.

The Purposes for Which Instructional Simulation is being used in Professional Education

Cruickshank and Broadbent found that simulation in professional education has been used largely as an instructional methodology although they did find it being used for other purposes, such as situational testing: orientation or exposure to reality, research, and design and operational analysis. Four uses for instructional simulations presently being employed in professional education have been identified. These uses are to make content of instruction more relevant by involving participants in lifelike experiences; 2) to wed theory and practice; 3) to modify behavior; and 4) to teach

principles, procedures, criteria, or other higher cognitive level materials. Below is a short description for each of these uses.

Make Content of Instruction More Relevant

Simulations are being used to make material relevant to the student teacher by involving him in a decision-making situation, using skills and knowledge that would not normally be applicable until his first teaching situation.[3] In speaking to the point Tansey and Unwin state:

> In the lecture, tutorial or seminar situation where the student is learning the methodology of the classroom situation, the context of learning is not the context in which the knowledge will have to be applied. This is an incompatibility which is much more than a physical one, and makes it difficult for the trainee to relate what is said in these circumstances to the situation that exists when he is in the classroom actually teaching. It is this as much as anything that causes the charge of excessive theorizing to be laid at the doors of colleges of education.[4]

LaGrone argues for such an experience by stating:

> The professional component of a program of teacher education for the last 25 or 30 years has taken for granted that the teacher education student will put together the talk about education and his teaching. The recent research in teaching and work in theory indicates that an assumption of this magnitude is more likely false then true.[5]

Marten, Dunfee and Buffie state:

> A major theme running throughout the simulated program...was that the elementary teacher is a decision-maker. Attention and energies were concentrated on the decisions that teachers must make in every fact of their work.
>
> All the materials were gathered to serve one prime objective: <u>to force the student to take action upon a critical situation occurring in the environment of the school and/or classroom</u>.

Mcquigg appears to be a little more emphatic on this point,

> ...the simulated package allows a great deal of emphasis to be put on the decision making as an important part of the teacher's role.....This is in contrast to the student sitting in the regular class, waiting for someone else to suggest a decision to be made. He does not have to take a stand one or another in a situation that is discussed in general terms. However, if he is "playing" the part of the teacher and a decision is called for....he will have to take a stand one way or another.[7]

Wed Theory Into Practice

This purpose is similar in many respects to the previous one. Simulations are being used to wed theory and practice by providing a setting in which the student practices applying principles and knowledge to complex problems.[8]

Tansey and Unwin have a great amount to say concerning this purpose. They state:

> It is claimed by the critics of colleges that they are too theoretically based, that their students do not get enough time in the classroom actually practicing the art of teaching, and that much of what students are taught has little direct relevance in the classroom. A good deal of this criticism may seem to be justified, but if the teaching service warrants the status of profession than surely the teaching of these background disciplines is fundamental and necessary.
>
> It could be that colleges of education have gone too far away from this practical approach. ....but students do not get enough time in the schools: they maintain that this is so, and lecturers are aware of it. Yet there is a stalemate because there just are not places in the schools to accommodate all the people we are training.

> It is necessary in these circumstances, if we wish to relate the theory of teaching with its practice, to search for an alternative to visits to an actual classroom. We must apply the theory of teaching to the classroom and try to relate the two within the confines of the college if it cannot be done in the schools.[9]

They go on to state that simulation seems to offer this alternative.

Modify Behavior

Cruickshank and Broadbent found that a few simulations are apparently attempting to mold or shape behavior while others are more interested in assisting the student in sensing problems and developing a rationale problem-solving approach.[10] On the other hand as they point out, "All feedback systems involving humans are behavior shaping, that is, their intention is to steer the participant on a current course."[11] It is difficult to conceive of any simulation experiences which would not have a great degree of behavior modification thrust with it.

Teach Principles, Procedures, Criteria, or Other Higher Cognitive Level Materials

Probably the greatest number of simulation programs teach principles, procedures, criteria, or other higher cognitive level materials.[12] Apparently this purpose is closely related to problem-solving and decision-making. In a recent article Buffie, Trojcak and Winkler point out that in terms of the cognitive domain "the student will learn to make more effective decisions and to identify the salient characteristics (components or elements) related to decision making."[13]

In support of such an objective they contend:

> "Of the myriad of possible objectives which could be included in the training of teachers, three seem to be most encompassing. An individual learning to become a teacher must also learn to be an effective decision maker (problem-solver), an effective human relater, and an effective professional. Ones effectiveness in the latter categories is significantly effected by the decision that he makes. In reality, the sum of ones decisions is the sum of his effectiveness.
>
> The ways in which teachers identify and interpret existing conflict and their making of decisions per se, certainly leaves much to be desired. Nevertheless, the confidence in their decisions suggest that teachers feel considerable assurance that they possess sufficient information upon which to base their decisions and that all reasonable alternatives have been explored prior to the making of a final decision.
>
> .....Through such simulations there can gradually build up, as it were, a repertoire of reactions based on his own emerging set of values....But practice and simulation can offer a strong possibility that beginning teachers will be more aware of the existence of problems, more capable of choosing alternative solutions to such problems, and more sensitive to the consequences of their choices.[14]

This emphasis by Buffie et.al. appears to be significant, due to the fact that their program is focused on human relations.

Theoretical Dimensions of Instructional Simulations

Cruickshank and Broadbent have discovered that existing instructional simulations can be understood in terms of a theoretical three-dimensional cube with scope, mode, and model as the dimension.

This cube is illustrated in the Chart on the following page.

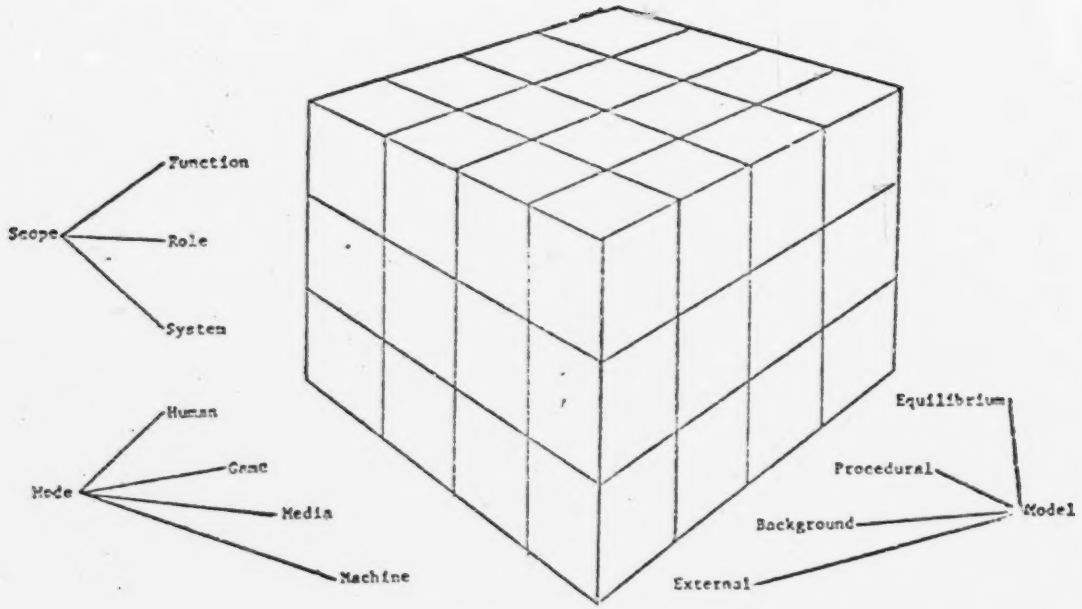

CHART 1 -- Cruickshank and Broadbents Model Illustrating the Structure Aspects of Instructional Simulations. (Source - Cruickshank and Broadbent, op. cit., p. 8.)

In describing the components of this theoretical model, these authors state:

> The scope of the simulation is smallest when the model is meant to teach functions. An example of a function that could be taught through simulation is making effective classroom tests....The second category of the scope dimension is the one most used by developers of simulations in professional education. The role of the teacher, principal, and counselor have all been simulated more than once. Simulations of full systems are probably the most common types of instructional simulations in the Social Studies, but very few of these are to be found in professional education.
>
> The second dimension, mode of representations, extends from simulations which are presented almost completely through specially structured human groups, such as T-groups, to simulations which are presented entirely by machines, such as the Link Trainer. Media-ascendant simulations are the most common in the materials presently available in professional education since they provide a good combination of control and flexibility.
>
> The third dimension, the nature of the model, is perhaps the most important one and the most difficult to define. It describes the dynamism of the model. The external model is a static physical model, such as the space simulator in which the astronauts familiarize themselves with a space environment. A back ground model is similar to the materials used in case studies. It is often a classroom within a school within a community. These are the most common models in professional education, while equilibrium models of full systems are most common in other areas. Equilibrium models are economic models that can be easily presented in a game mode. A perceived model is dynamic enough to determine the main features of the simulation, yet not so dynamic as the equilibrium model which allows for the manipulation of many

> variables. Many machine simulators are procedural trainers teaching one particular function, such as how to operate a machine.[15]

Present Simulation Programs for the Pre-Service or In-Service Preparation of Teachers

Cruickshank and Broadbent found that the largest number of simulations in professional education concern the preparation of teachers.[16] These simulations include: (1) Classroom Simulation, (2) Low-Cost Simulation, (3) Teaching Problems Laboratory, (4) Inner-City Simulation Laboratory, (5) Problems of Racially Desegregated Schools, (6) Project Insite, (7) Model Elementary Teacher Education Program (Teachers College), (8) Simulated Classroom Situations, (9) Science Inquiry Laboratory, (10) Informal Reading Inventory, and (11) Stimulus Films. These authors point out the fact that the simulations listed here do not include all of the ones available in professional education, but they do represent the field in its present state.[17] The following is a short description of the simulations listed above.

Classroom Simulation[18]

The pioneering work in the field of simulation in teacher preparation was done by Kersh. He developed a classroom simulation initially based on behavior-shaping principles.

Multiple projection techniques were used to present participants with episodes occurring in Mr. Land's sixth grade. The participant reacted to each episode on the basis of information gained from the

film and from background materials, such as cumulative records. He is then shown a possible consequence of his decision as another short film projects the pupils' predicted reaction.

Kersh's classroom simulator provided "specific-other" feedback to the participant after he responded to each problem sequence. The feedback provided was intended "to communicate to T (Student teacher) the most likely consequence of his teaching behavior."[19]

In general, for each response by T, an alternative feedback (usually selected from two or three predetermined by the jury) was provided. Since no more than three feedback alternatives are available, there is an inherent limitation. Kersh maked no claim that the feedback provided is absolute. He explained that the teachers were told that the student reactions on the film are representative of what one group of experts believe.[20]

It became apparent that one shortcoming of the technique is that it is tutorial in nature and required a great deal of skill on the part of the evaluator or supervisor.[21]

Low-Cost Simulations[22]

Kersh and his associates at Teaching Research carried out subsequent research on variables associated with the effectiveness of simulation and continued into a low cost simulation project.

Currently two sets of "low cost" instructional simulation materials have been developed. One of the sets of materials deals with problems of classroom management and the other deals with discovery teaching. The Classroom Management series is geared

toward helping participants "become more effective classroom managers and thus better teachers."[22] Two phases of the simulation are provided. One phase is to teach certain principles of classroom management; and the second phase is to exercise the application of these principles.

In Phase I, participants, using an exercise book and a film-tape presentation on an Audascan projector, react to the way a teacher handles classroom management. Seeing two teaching episodes, the participant must choose which teacher behavior is preferable and state why in the exercise book. The participant receives feedback as he compares his written response with one contained on the following page in the book. During the final part of Phase I, participants see a film on how the class would respond to the two teaching strategies employed.

Phase II "gives the participant an....opportunity to practice... application of the principles (learned in Phase I).[23] In this phase participant responses to filmed incidents are compared with responses to the same incident made by "expert teachers." Finally, a third section of the film depicts how children would probably respond to the "expert teacher's" behavior. Ultimately, feedback is obtained as the participant compares his response with that of the "expert." A more detailed account of the "low cost" simulation project is given in Chapter III of this present report.

Teaching Problems Laboratory[24]

The Teaching Problems Laboratory was the first of a group of media-ascendent role simulations with a background model. This simulation which is presently available commercially, can be used in pre-service or in-service training of teachers.

Teaching Problems Laboratory was intended to give student teachers a chance to make decisions in a lifelike classroom environment.[25] A fictitious school district called "Madison" has been created. Each participant, all assuming the role of Pat Taylor, a first year fifth grade teacher, is introduced to the community, the school district and the school by means of two film strips. Pat Taylor also receives progress cards, sociograms and reading progress cards for thirty-one children, seventeen boys and fourteen girls; and also things such as faculty handbooks, course of study, and A V manuals.

There were thirty-one teaching problems in the exercise including those of student behavior, parental relationships with the school, curriculum planning, teacher method, classroom management, and evaluation of learning. It was not suggested by the designers of the simulation that there are single correct answers to the problems, but the written answers given by students form a focus for discussion. The problems which make up the in-basket were presented in written incidents, on film and by means of role-playing. The Teaching Problems Laboratory contains two units, an Institutional Unit designed for the agency conducting the training program, and a Participant's Unit containing those things that Pat Taylor has already been stated to have.

The Institutional Unit contains the two film strips and a gramophone record that goes with them and on which the 'superintendent' and the 'school principal' introduce the community and the school. Apart from this they contain the film, role-playing cards and written problems which make up the in-basket and finally a Participant's Unit.

Cruickshank and Broadbent point out that this simulation provides a more open-ended vehicle wherein feedback is not limited to specific responses.[26] Rather, participants working in groups value each other's responses by projecting possible consequences of the response for the child, teacher, administrator, or other ("specific-other"). In so doing participants are encouraged to role play confrontations or differences of opinion.

On the other hand, it is limited by the ability and experience of the group members. Responses of pre-service teachers are not those of experienced teachers. However, additonal feedback can be provided by having professors or school personnel evaluate participant alternatives. Unlike Kersh's work no attempt was made to formulate normative data to shape behavior in a predetermined fashion.

Inner-City Simulation Laboratory[27] and Problems of Racially Desegregated Schools[28]

Venditti's Problems of Racially Desegregated Schools is similar to the Teaching Problems Laboratory, as is the Inner-City Simulation Laboratory developed by Cruickshank.

As a rationale for the development of Inner-City Simulation Laboratory, Cruickshank states "the inner city is the most difficult kind of teaching".[29] He found that most universities are doing nothing about preparing teachers for the cities and many have no intentions of correcting this situation in the future.[30] He hopes that Inner-City Simulation Laboratory will provide a "safe" setting wherein both the professional college and its students can explore the phenomenon they understand so little. It is hoped the exploration will produce teams of teachers along with professors who will be ready for the realities of life that have too long been avoided.[31]

Cruickshank proposes two uses for Inner-City Simulation Laboratory

> THE INNER-CITY SIMULATION LABORATORY, like the TEACHING PROBLEMS LABORATORY, is designed to provide opportunities for pre- and in-service teachers to accomplish two goals that are not readily attained through normal modes of academic inquiry. First, the Inner-City Simulation Laboratory attempts to create a lifelike model of a ghetto school and neighborhood so that the learner can study the setting and attempt to understand it. The learner can operate like the anthropologist and observe the phenomenon of culture--in this case both the neighborhood's and the school's.[32]

Thus overall use of the Inner-City Simulation Laboratory permits the learner to inquire as a social scientist in to the educational scene and reflect upon its problems.[33]

Project In-Sight and the Model Elementary Teacher Education Program (Teachers College)

The use of integrated simulation systems is being undertaken by Project Insite at Indiana University. Separate materials are being used for elementary and secondary education students. A detailed description of the use of simulation in Project Insite is provided in Chapter II of the present report.

The Model Elementary Teacher Education Program developed by Teachers College, Columbia University, describes a teaching game and a simulated school which are to be integrated into the proposed program. "These two programs are probably the most ambitious simulation systems in teacher education at this time."[34]

Simulated Classroom Situations

Simulation Exercises for secondary teacher education by Swan and Johnson is a scaled-down version of a role simulation.[35] No background model is developed. The exercises appear to be a few isolated incidents, some workbook exercises, and a few photo situations. A more recent adaption of this type of simulation exercise entitled "Simulated Behavioral Teaching Situations" has been developed by Hearn and Reddick.[36]

This book of simulations includes 54 different simulation exercises. These 54 exercises are broken down into nine major areas which are: (1) objectives, (2) planning and motivation, (3) psychological principles, (4) techniques of teaching, (5) innovations and recent trends, (6) discipline, (7) student evaluation, (8) teacher evaluation, (9) non-instructional duties, problems, and responsibilities of teachers. The

authors of this book stated three objectives for the book. These include: (1) a provision of behavioral simulation experiences for students and teachers based on problems actually confronting elementary and secondary classroom teacher; (2) placing students and experienced teachers in problematic classroom situations which involve them in critical thinking, logical analysis, and role playing; and (3) the improvement of the student or teacher's ability to solve classroom problems and thereby improve instruction.[37] Although these materials may be very effective, they would not be classified as a simulation according to the definition provided earlier.

Others

Cruickshank and Broadbent cite examples of simulations which have been created for improving the training of teachers in subject areas. Lehman used a structured form of peer teaching which he called Simulated Classroom Situations, to assist pre-service science teachers.[38] In many ways, this method is similar to microteaching, but it is truly a human-ascendant role simulation using a background model, while microteaching is considered scaled-down teaching.[39]

In a more recent article, Rogers points out the need for the development of simulations in the preparation of social studies teachers.[40] She found that there were no commercial simulation materials designed specifically for use with social studies teachers. She goes on to say:

> Consequently those used by college teachers of social science education or by supervisors as in-service training have been designed or made by them for their individual use. The

> application and utilization of these materials by other instructors must be examined and the better materials and ideas disseminated. Careful examination is needed to determine the areas in which simulation makes its biggest impact in preparing social studies teachers.[41]

Utsey, Wallen, and Beldin produced film simulations to train teachers in the use of the Informal Reading Inventory to assess a child's reading level.[42] They concluded that film simulations may be a powerful tool for establishing referents common to instructors and student teachers.

Cruickshank and Broadbent note that it is obvious that role simulations with background models dominate the field. This is due to the need for students to be able to assume their future roles during periods of their training.

Criticism of Commercial Simulations

It appears that most of the criticisms of commercially available simulations are similar to those once leveled against programmed learning. Objectives are either not given or are vague. Minimum and maximum entry levels for participants are not specified, nor is research on the effectiveness of the simulation available. Two of the greatest deterrents to use of commercial materials are lack of proper training of the instructor and lack of a clear presentation of how the simulation should be integrated with the rest of the program.[43]

Issues to be Resolved

Cruickshank and Broadbent have identified numerous fundamental issues surround the development and use of simulations for the preparation of educational personnel. However, these issues may be subsurted within four overlapping categories: developmental, administrative, instructional, and evaluative. The following section describes some of the issues involved in the development of the simulation.

Issues in the Development of the Simulation

Several issues concerning the design and development of successful simulations have to be resolved. These issues center around the (1) object of the simulation, (2) scope of the simulation, (3) quality of the system employed, (4) game quality, (5) feedback, (6) realism and (7) content-process.[44]

Object and Scope of the Simulation

The first problem for the designer is to decide why and how simulation can be applied to the total professional education training program. In other words, what part of the training system, if any, is likely to be improved or complemented through the utilization of a simulation? On the other hand, the simulation can be an addition to the training system and need not modify nor replace exixting parts of it.

Once the place of the simulation in the training system has been determined, the designer is faced with the decision of what reference

system to analyze. In referring to this issue Cruickshank and Broadbent state:

> The relationship between a training system and its reference system is dynamic, that is, the systems are responsive to one another. Training systems constructed without careful attention to the reference system are not likely to be useful unless the intention is to create a new or different social institution. A simulation, like any part of the training system, is based upon a model generated from an examination of reality. The simulation, therefore, will vary in its effectiveness in direct proportion to the validity of the model upon which it is based.[45]

Quality of the Simulation Employee

Once the place of the simulation in the training system has been determined and careful analysis of the reference system has been made, the designer is faced with several decisions. One of these is whether the simulation will contain elements of competition either interpersonal, intrapersonal, or man-machine. Should the simulation be characterized by interpersonal competition it probably will be known as a simulation game.

The designer must also determine whether he can or wants to create an open loop or closed loop feedback simulation. In the former the trainee can be subjected to and affected by independent variables produced during the simulation over which he has no control.

In a closed loop system interaction and manipulation of variables are possible. Most simulations in education are closed loop.

Feedback

Another major issue which the designer must decide on is the nature, extent, and reliability of the feedback to be used. Feedback is used to refer to the return to the participant by himself or others of perceptions or sensations resulting from his reactions to or interactions with the simulation.[46]

Simulation feedback may be general or specific and received from self or others (either man or machine).

All feedback systems involving humans are behavior shaping, that is, their intention is to steer the participant onto a correct course. As such, simulations are not neutral.

Participant responses are evaluated (rewarded or corrected) according to normative data. Recently this appears to present a major problem. Present undergraduates question very seriously whether any past norms are valid in light of the fact of the present conditions of most schools. Many refuse to accept the norms from past practices and ideas of teaching. It is difficult to find a model school, let alone a model school system.

Due to the fast changing nature of social norms, simulations built or rigid feedback mechanisms may become outdated very quickly. In all the cases described feedback is limited in some way.

Realism

Another issue which must be faced in the development of simulation is realism. How lifelike must the simulation be? Apparently in most simulations for preparing teachers, physical realism may be far

less important than psychological realism.

Content-Process

Still another issue facing the developer is the dilemma of process versus content. Is the intention of the simulation to replicate an environment in which the participant practices an act learned elsewhere, or is the simulation a teaching device itself? Some simulations may have both characteristics. The low-cost simulation material from Teaching Research teaches principles (thus content) and then tests participants on their ability to note the principles and to apply them (thus practice or process).

Summary

Twelker has outlined 13 steps to be taken in designing simulation systems. One can get a general idea of the complexity of this process from looking at these steps. They are:

1) define the instructional problem
2) describe the operational educational system
3) relate the operational system to the problem
4) specify objectives in behavioral terms
5) generate criterion measures
6) determine appropriateness of simulation
7) determine type of simulation required
8) develop specifications for simulation experience
9) develop simulation system prototype
10) try out simulation system prototype

11) modify the simulation system prototype

12) conduct field trial

13) make further modifications to the system deemed appropriate from field trial evidence.[47]

Issues Involving Administration of Simulation

A second broad category of problems which have been identified, faces administrators of simulation programs. Included are: (1) placement of simulation in training programs; (2) practice; (3) group size; and (4) length of simulation. The following sections provide a brief description of these issues.

Placement of Simulation in the Training Program

Depending upon its character and objectives, simulations could be placed from first to last in the total professional education curricula. Cruickshank and Broadbent explain if the simulation is intended to provide an orientation to the reference system (This is what it will be like.), then early placement is logical so that the experience can be used to assist the participant in making a more informed career choice. Early engagements of this nature can also help to make participants aware of the kinds of training needed in order to function adequately in the reference system. In this sense simulations can serve to make the subsequent teacher education curriculum more relevant. Such simulation should be environment rich--realistic and concrete. On the other hand, placement of the simulation late in

the program permits the participant an opportunity to synthesize and apply principles learned in education courses.[48]

Practice

Another issue facing the administrator is whether involvement in a simulation should be massed or spaced. Arguments have been proposed for both approaches. In the case of the use of simulation in Project Insite, one full week was devoted to the simulation program. On the other hand, it was found in the Classroom Management Series, the students tended to become fatigued if too much of the simulation experience came at any one time. Another consideration are the advantages of the integrated use of simulations with other parts of the training program.

Group Size

Size of the simulation group is another factor of concern to administrators. When simulations are developed for use in groups, the question of size is significant not only in terms of learning outcomes, but also in terms of per pupil cost.[49] The Insite Project simulations, Teaching Problems Laboratory and the Inner-City Simulation Laboratory, are examples of simulations requiring group interaction, while Teaching Research's low-cost simulation combines both tutorial and group approaches.

On the issue of group size, Cruickshank and Broadbent state:

> The question of size seems to be related to features and purposes of the simulation. Depending upon the objectives sought, the group can vary in size up to a critical point. For each simulation the critical

> point can be a function of space, instructor skill, group characteristics, time, or other. Therefore, it probably would be difficult to predict an optimum number of participants without attention to these variables.[50]

Length of Simulation

Administrators face the issue of using parts of a simulation program, or having to use the whole program. It appears that in some cases, parts of a multifaceted simulation can be used in isolation. However, in most cases, developers see the whole as being greater than the sum of its parts and caution that selective use of episodes, incidents, or moves will have less impact out of the simulation's context.

Issues Involving the Instructor of the Simulation

The third set of issues which have been identified is primarily a concern of the instructor or simulation director.[51] This set relates to the director's role and motivation of participants.

In general, most developers of instructional simulations seem to view the director as a facilitator of learning. In discussing the instructors role in the Inner-City Simulation, Cruickshank strongly suggests a non-directive role for the simulation director. He states; "For the director, the point to be remembered is that the participant should have every chance to succeed or fail on his own." [52] Such simulations require the director to set the stage by providing

orientation and materials and then to keep participants working according to some predetermined schedule.[53]

The role of the director appears to be significant and this aspect needs investigation. It was found that in research on classroom simulation at Teaching Research more variance was contributed by instructor differences than by treatment variables.[54]

"Unless a participant in a simulation perceives the conditions, physical and/or psychological, as realistic enough operationally, he probably will not accept his role play (if a role-assumption simulator) or behave himself."[55] Participant motivation may be considered a responsibility of the developer, the way the simulation is presented, the instructor's behavior, and the content of the simulation itself. In addition, although the majority of participants are extremely motivated in simulations, desire and ability to function in a simulation appears to be related to participant personality differences.

Issues Involving the Evaluation of Simulation

A final set of issues re es to the evaluator's role in simulation. These include (1) specificity of simulation outcomes, (2) objectivity or subjectivity in evaluating performance, and (3) transfer of training.[56] These issues are briefly summarized below.

Much more research is needed on the outcomes of teacher behavior before real specificity in simulation outcomes can be demanded or expected. "Since there are no valid predictors of teaching effectiveness, each simulation director must define his own or borrow from the work

regarded as acceptable by professional educators."[57] Because of the factor and probably others, simulations often are guilty of involving participants with little attention given to the outcomes expected.[58]

Cruickshank and Broadbent suggest that since developers have given less attention than necessary to the problem of defining outcomes, the instructor or the simulation group itself should develop some boundaries which define the limits of acceptable participant behavior if such boundaries.[59]

In focusing on the issue of transfer of training, Cruickshank and Broadbent conclude that simulation in professional education have been available long enough to generate research findings about transfer of training."[60] In fact a substantial amount of research is required to investigate most of the dimensions of simulation, and to validate the use of simulation in general.[61]

Advantages of Simulation

Through their own work and their knowledge they have gained from an exhaustive study of the literature, Cruickshank and Broadbent have identified several major advantages for using simulation in preparing teachers. They have found that simulations (1) are relevant, (2) permit the trainee to be himself, (3) are safe, (4) permit control, (5) permit the wedding of theory into practice, (6) are economical, (7) are engaging psychologically, and (8) promote knowledge of and skill in group dynamics.[62] These advantages are briefly explained below:

Simulations are relevant: "Very often undergraduate students who have just completed student teaching bemoan that what they have learned in their education classes seems to have little or no application to what they must do as teachers."[63] Those simulations which have drawn carefully from the real world can hopefully provide a means by which personnel in training can be exposed under controlled conditions to the most critical aspects of their future work or to elements that cannot be reproduced except in laboratory settings.[64]

Simulations permit the trainee to be himself: It is evident that the intern or student teacher must attempt, at least superficially, to take on the characteristics of the master teacher, even to look like him. "This phenomenon, which can be called submergence of identity, prohibits the trainee from being himself."[65] However, suppose that the novice is able to be himself. Since the class is conditioned to behave in rather well defined ways, introduction of another teaching style can cause anxiety among the children.[66] "On the other hand, simulations are intended (with few exceptions) to permit the participant to be himself--to learn about himself as he tries out his unique behavior. There usually are no prescriptions."[67]

Simulations are safe: The first time a novice teacher encounters critical decisions, he is usually alone in a classroom. Many unnecessary errors occur as poor decisions are made in the heat of emotion or in an effort to maintain the power of the teacher's role. On the other hand, simulations permit participants to engage in very serious

encounters where they must make decisions and consider the consequences thereof. As Cruickshank and Broadbent explain

> The opportunity to confront real problems in hypothetical settings permits one to work toward gaining intellectual control over behavior. Errors can be made and studied and situations reenacted until the participant and/or his instructor feel he is confident and able to meet the problem at an intellectual rather than at a visceral level.[68]

Simulations permit control: Simulations permit the instructor to control what happens to the trainee even to the extent that different trainees can be exposed to different conditions.[69]

Simulations permit the wedding of classroom theory and practice: Although much of professional education is theoretical, the laboratory requisite for contrasting the theory with reality or for testing hypothesis is usually unavailable. Simulations can be used for such purposes.[70]

Simulations are economical: Providing laboratory experiences in student teaching is unusually time-consuming for staff, not to mention the interruptions to public school activities. Although it is not likely that simulations can substitute for all laboratory experience, sufficient evidence exists that they can replace some of it. As Cruickshank and Broadbent report:

> Simulation training when tested under the most stringent conditions was an unqualified success as a teaching device.... It was at least as effective as an equal amount of student teaching.[71]

Simulations are psychologically engaging: The most important reason for interest in simulation appears to be the overwhelming excitement and involvement it creates in participants. In Project Insite, the simulation week was the most exciting part of the program for many of the students.

Simulations are effective in promoting knowledge of group dynamics, in providing opportunity for improvement of personal skills in group work, and in aiding self-evaluation.[72]

Disadvantages of Simulation

Some difficulties surrounding the utilization of simulations have been identified. Some of these difficulties are described below.

Simulations do not fit neatly into the program. Since they are departures from the textbook, they are difficult to introduce into the traditional patterns of teaching load, student credit, schedules, classroom space, and equipment.[73]

Simulations often fail to provide empirically derived feedback. Even those simulations that are closed-ended, that is, those that provide feedback to selected participant responses, fail to provide anywhere near the range of possible responses to the many different teacher, administrator, or counselor behaviors. Simulations that are open-ended depend upon the wisdom and training of the participants.[74]

Instructors are not well enough acquainted with or trained to utilize simulations fully: Publishers generally do not feel that training persons in the utilization of commercial products is their responsibility, although limited assistance usually is available.[75]

Simulations may not be well founded or valid: Simulations and simulation games are often developed which have little relationship to real training needs. Each simulation should be based upon careful study of the reference system. "Even when simulations result from study of the reference system, the resultant selection of problems to be solved, operations to be performed, and so forth may arise from intuition rather than empiricism."[76]

Questions in Need of Research

Cruickshank and Broadbent suggest the following questions for further research.

- Do persons react under simulated conditions in the same way as they do in real life? Are simulators useful for prediction?
- What is learned during a simulation?
- What can be done to increase feedback capabilities?
- What effect does simulation training have on subsequent performance?[77]

PART II

INTRODUCTION TO PART II

Part I of this report summarized the state-of-the-art in the use of simulation in teacher preparation. Much of the information that was presented was taken from a recent state-of-the-art report written by Donald Cruickshank and Frank Broadbent. The major areas that were discussed in Part I were 1) the purposes for which instructional simulation is being used in professional education; 2) the theoretical dimensions of instructional simulations; 3) present simulation programs for the pre- and in-service preparation of teachers; 4) issues to be resolved; 5) the advantages and disadvantages of simulation and questions in need of research.

Part II of the report presents a detailed description of three simulation programs which are presently being used in teacher preparation programs. Each of these programs is presented in separate chapters. The following is a summary of each of these chapters.

Chapter II - Project Insite: The utilization of simulation in Project Insite is an example of the use of an integrated simulation system. Due to this fact, a rather extensive description is presented, detailing the aspects of the total teacher preparation program provided by Project Insite. This was done to illustrate to the reader the context in which the simulation is integrated into the total program. An extensive account of the procedures used in developing the simulation is also provided. It is hoped that as the reader studies

Chapter II, he will be able to identify and relate the aspects summarized in Part I to this specific case example.

Chapter III - Low-Cost Instructional Simulation for Teacher Education: The "low-cost" simulation project is an example of a simulation based on the theory of operant conditioning. It illustrates the use of established norms for providing feedback to the participant. Again, a rather extensive account of the historical development of the system is provided.

Chapter IV - Inner-City Simulation Laboratory: This system is an example of a commercial program which is available. It is especially appropriate in this report, for it has been developed by Cruickshank. Due to this fact, many of the aspects discussed in Part I are easily identifiable as one studies the development and use of this specific case example.

In all of the above-mentioned case examples, sample items and incidents have been provided in the descriptions. Again, it is hoped that the reader will identify and relate the general aspects presented in Part I to the specific case examples in Part II. The author suggests that, after studying the case examples, the reader should reread Part I.

CHAPTER II

PROJECT INSITE

An Overview of the Project

Project Insite was a six-year teacher education project at Indiana University. The program was funded by a Ford Foundation grant that amounted to almost a million dollars. The grant began in July 1963 and terminated in June 1969. The project involved an accelerated and innovative program for elementary and secondary teachers. The purpose of which was

1. to examine old systems of teacher education
2. to develop innovations
3. to conduct experimentation
4. to sponsor research and
5. to produce teaching aids.[1]

From the beginning the project made two major guarantees; (a) a resident teaching experience, and (b) both the Bachelor of Science and the Master of Science in four academic years. The students participating in Project Insite enjoyed a special program which carried them through an undergraduate and a graduate program with four special characteristics:[2]

1. the combination of several sets of related courses into "blocks" or "seminars" or "workshops"
2. the "acroclinical" semester, utilizing educational theory, simulation, observation, participation, methods instruction, and student teaching in a synthesized or integrated experience

3. a resident teaching experience for one semester in the fourth academic year

4. a final graduate semester including a Professional Studies Package to complete degree requirements.[3]

Of special interest to the present report are the activities involved in one of the components in the four year program; this being the acroclinical semester. The acroclinical semester[4] during the Insite Project broke with tradition and practice by structuring a program which required the full time of the student for an entire semester. For both the elementary and secondary majors the program combined the areas of methods and student teaching and was conducted in the environment of University Elementary School. Members of the faculty from the School of Education and Insite staff associates moved into offices and classrooms in the University Schools. The goal in the acroclinical semester was correlation and interrelation of instruction in professional methodology with the psychology of learning and student teaching in the hope of closing the wide gap between theory and practice. The major thrust for the use of the simulation materials for both the elementary and secondary programs were found in the acroclinical semester.

Due to the fact that the utilization of simulation was somewhat different in the elementary and secondary programs, these programs are treated separately in this report. The following section describes the elementary program.

The Elementary Teacher Education Program[5]

As was stated earlier the elementary portion of the Insite program made two major guarantees to the students (1) the resident teaching experience, and (2) both the B.S. and M.S. degrees in four academic years. The number of hours of credit required for the M.S. degree at the end of four years is 160. Although the program is not actually broken down into two distinct sections--it continues from the third year into the fourth, which no application requirements or special procedures--the undergraduate requirement for graduation is 124 hours, the remaining 36 hours fulfilling the M.S. requirement.

Although individual student's 4 year programs may vary somewhat, the diagram illustrated on Figure 1 presents one possible entire plan set out for the Insite student.[6] As illustrated in this diagram, the undergraduate phase of the Insite program is divided into three major areas. In terms of preparation in the academic areas, Insite students are required to take a minimum of 63 semester hours of general education including work in the arts, the language arts, mathematics, science, and social studies. In addition, each student is required to have an area of academic specialization (24 semester hours).[7] Work in special education or early childhood education may also be used to satisfy this requirement. It is in the area of professional education - 29 semester hours - in which the greatest amount of innovation in teacher education occurs. The three one-hour seminars noted below in this category may also be used to satisfy the general education requirements. The Behavioral Sciences Block of courses are also required of elementary majors.

Undergraduate Program*		Graduate Program	
General Education	63 hours	Professional Educ.	21 hours
Professional Education	29 hours	Resident Teaching (15)	
Specialization	24 hours	Professional Study Pkg. (6)	
Electives	7-26 hours		
		Electives	15 hours

Sequence of Professional Studies**

	SEMESTER I	SEMESTER II	SUMMER
First Year		Natural Sci. Sem. (1 hr.)	
Second Year	Social Sci. Sem. (1 hr.)	Humanities Sem. (1 hr.)	
Third Year	Creative Arts Workshop (5 hrs.)		
	Human Growth and Learning (5 hrs.)	Acroclinical Sem. (16 hrs.)	
Fourth Year	Resident Teaching (15 hrs.)	Professional Study Package (6 hrs.)	

Fig. 1--The entire plan set out for the Insite student: one possible alternative.

The following section describes the innovations introduced into the professional education component of the program.

Innovations in Professional Education

The 29-hour professional education group consists of new courses developed to implement the experimental program and to determine if such changes are effective in programs of teacher education.

The Seminar Courses: The seminar courses were designed to demonstrate the interrelatedness of disciplines within each of the three major fields of study as well as to provide students with an opportunity to see how scholars actually deal with problems, concerns, and/or issues related to

a given discipline and field.[8] Each seminar, though moderated by a faculty member from the School of Education, was planned and taught cooperatively by faculty from several colleges and schools on the Indiana University campus.

The Creative Arts Workshop: The Creative Arts Workshop, offered exclusively to elementary education majors, was developed as an experimental design involving the areas of art, music, and physical education.[9] The workshop was planned and taught cooperatively by representatives from the School of Music; the School of Education; and the School of Health, Physical Education, and Recreation.

The five major concepts premeating each of the arts, which were selected for the purposes of the workshop, were the following: rhythm and time, space and distance, melody and line, color and dynamics, and form and design.[10] Two weeks of the workship were reserved for actual work with elementary pupils.

Human Growth and Development: The framework of the new course, P280 Human Growth and Learning, was intended to provide the backdrop against which observation, interpretation, and analysis could be made of teaching-learning situations. This frame of reference had five major components, each consisting of two or three models of theories: Motivation, personality, learning, development, and cognition. Each component consisted of two stages: the interpretation and description of what was actually taking place in a learning situation; and action, based upon interpretation.

In general, the emphasis of the course was upon the development of psychological inquiry skills as these related to the various topics under consideration. Recognition was given to the fact that many different kinds of learning are possible and that there are different theories for each type of learning.[11]

The Acroclinical Semester: The most extensive and most comprehensive of all the innovations in the Insite program was the acroclinical semester.[12] Its primary purpose is to bring into closer relationship the teaching of methods (professional study) and the actual experience of practice teaching.[13] The diagram in Figure 2 presents an overview of the acroclinical semester for elementary majors.[14]

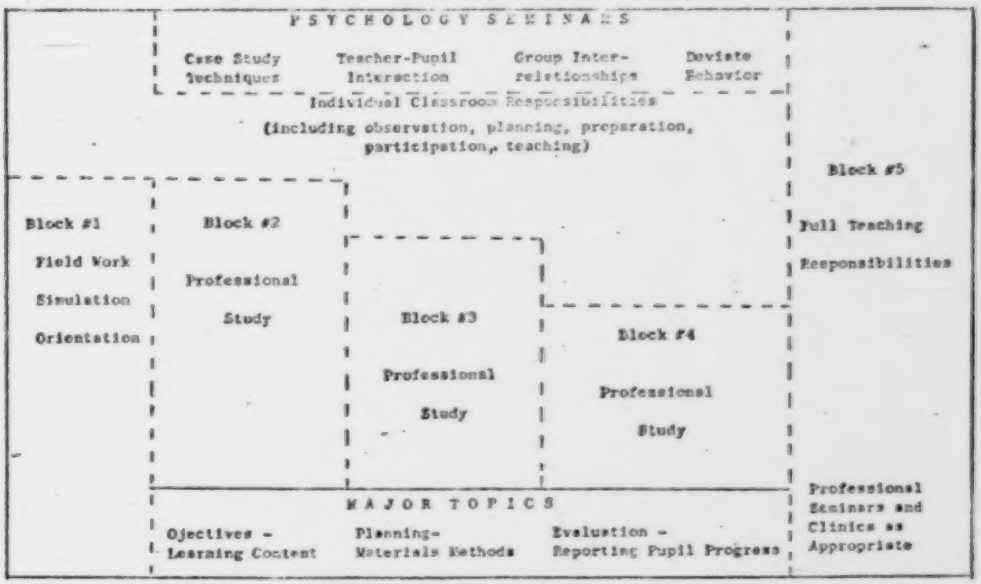

Fig. 2--An overview of the Acroclinical Semester for Elementary majors.

The acroclinical semester places the entire time of the student into an integrated experience for one full semester, combining methods, principles of education, and student teaching. Responsibility for students' entire program has been placed in the hands of a faculty team consisting of nine members--five college faculty plus four college interns. In addition to methods, and student teaching, a multi-faceted flexible program has been devised which also includes use of a simulation package, major topic presentations, video-taped teaching, focus on instructional media, and a program of standardized testing in the elementary school.[15]

Below is a summary of each Block in the acroclinical semester.

Block One: During this block the students were urged to spend from one to two weeks in the field prior to the beginning of the semester, usually in schools in their home communities. This experience later was compared to situations in the simulated school and in the University elementary school. In this manner, students were exposed to different methods of operating elementary schools, varying from the conventional to the innovative school.[16]

The work on campus began with an orientation phase. During this time students participated in a concentrated period of observation in their assigned classrooms. In addition to observation, students were taught the use of daily attendance records and any other forms and/or procedures dealing with the mechanics of running a class smoothly. These include any practices or materials which the cooperating teacher might feel appropriate for the person just beginning his student teaching.[17]

Block Two: This entire block concentrated on the "major topics," those basic elements of teaching which are common to all method areas: (1) objectives, (2) learning, (3) content, (4) materials, (5) educational media, (6) inquiry, (7) method, (8) planning and organizing, (9) evaluation, and (10) reporting pupil progress.

The general aspects of each topic were presented to the students as a whole by one of the members of the faculty team, followed by a small group discussion with individual methods professors.[18] Classes were held regularly throughout the day during this block.

Block Three: During this period there was a continued emphasis on professional study, but opportunity was provided for student teaching activities (four half-days). During this time students

participated in the first major overall evaluations of their work thus far in the semester. The college faculty was divided into two teams for conference purposes. Each team consisted of a representative from each of the specialized methods areas. Individual faculty-student conferences were scheduled for each student.

Block Four: Students now moved into half-time student teaching responsibilities. Only two formal methods classes were scheduled each day. Major topic presentations were limited to one a week. The major emphasis of the student's professional study during this period dealt with evaluation.

Block Five: As students began full-time teaching, their contacts with the University faculty continued on an individual basis, except for seminars that were scheduled one afternoon a week. The content of these seminars varied considerably. Frequently, the focus was upon instructional problems related to the various academic areas. At other times they dealt with organizational problems or centered attention on discipline and classroom management.[19]

The Use of Simulation in the Acroclinical Semester

The program of the acroclinical semester was formally initiated through simulation. A schedule of the activities provided during Block #1 of the acroclinical semester is provided in Figure 3.[20]

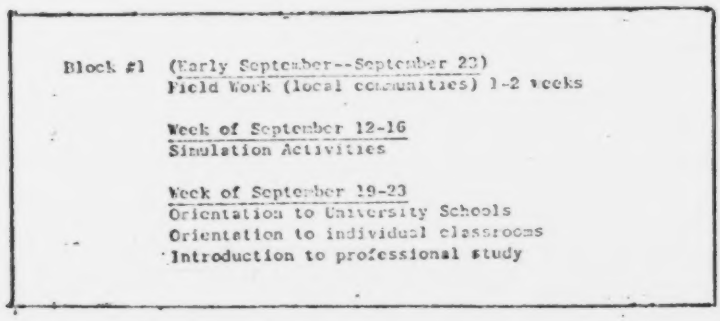
Block #1 (Early September--September 23)
Field Work (local communities) 1-2 weeks
Week of September 12-16
Simulation Activities
Week of September 19-23
Orientation to University Schools
Orientation to individual classrooms
Introduction to professional study

Fig. 3--The schedule of activities provided in Block #1 of the Acroclinical Semester.

As is indicated in Figure 3, a full week of instruction was devoted to a study and analysis of a simulated community and its schools. At this juncture simulation served to provide a common reference point for elementary majors as they began their professional study and analysis of teaching.[21] As an introductory component, the neophyte teacher was introduced to teaching in its larger context rather than relating to classroom procedure per se. Simulation, then, was a type of readiness activity in which students develop an appreciation and understanding of the total role played by the teacher.[22] The following section provides a further rationale for the use of simulation in this program.

The Rationale of Simulation as it was Used in the Elementary Program

The simulation phase of the program was designed to provide a common experience in seeing and observing a total school setting. From it a student could be expected to gain an understanding of the responsibilities and the problems related to an actual school environment before he begins his student teaching and professional study.[23] The simulated experience helps students get off to a smoother start and, at the same time, helps them maximize the advantages of their total experience in the acroclinical semester.[24]

Through simulation it is anticipated that college students in this preparatory stage will develop

1. greater sensitivity to the varying roles that elementary teachers must play and to the demands made on them.

2. greater sensitivity to the tremendous importance of knowledge and understanding of the needs of the pupils to be taught.

3. awareness of the ways in which communities and schools differ in terms of philosophy, policy, and modes of operation.

4. awareness of the importance of the climate and atmosphere which teachers develop in their classrooms.[25]

Through their simulated experiences it was hoped that Insite students would become highly sensitive to an understanding of the great variation to be found in America's schools.[26]

A major theme running throughout the simulated program and the acro-clinical semester was that the elementary teacher is a decision-maker. Attention and energies were concentrated greatly on the decisions that teachers must make in every facet of their work.[27]

All the materials that were gathered for the simulated school were gathered to serve one prime objective:[28] to force the student to take action upon a critical situation occurring in the environment of the school and/or classroom.

The simulated situations involved pupils, teachers, principals, parents, and other personnel. In each case, one point was outstanding: the student teacher was required to make a decision about it.

> In this way, the Insite student enjoyed the rare opportunity of examining a problem, deciding what action to take, but avoiding the need to "suffer the consequences" of a possible mistake. He became familiar with the responsibilities of a teacher before he actually exercised them himself.[30]

The Planning for the Simulation

The initial planning began during the 1964-65 academic year when Insite staff members made an exploratory study of simulation and its

potential for the Insite Project. The University Council for Educational Administration (UCEA) materials were studied in great detail, in addition to other reserved materials, (including Kirsh's materials).

Dr. Luvern Cunningham of the University of Chicago was invited to make several presentations of UCEA materials which seemed to hold special promise for the training of elementary teachers. By late spring 1965, the decision had been made to move ahead in the development of a simulated program to be used by students participating in the acroclinical semester. Exploratory contacts were made with the Griffith, Indiana, public schools regarding possible cooperation in the development of a simulated program. Dr. Cunningham agreed to participate as a consultant on this aspect of the Insite Project.

Development continued during the summer of 1965. The Elementary Acroclinical Planning Team (EAPT) identified the kinds of materials, data, and types of situations which might prove desirable in the development of a simulated program. These were categorized in several distinct ways:

1. instructional activities and problems
2. discipline or behavioral problems
3. relationships with professional and non professional staff
4. parent-teacher relationships
5. matters of policy[31]

The kinds of data to be gathered for the mythical classroom included the class roll, ages of pupils, I.Q. and achievement test scores, report cards, other data from accumulative folders, samples of pupil work

including routine assignments, classroom texts or examinations, and special project-reports, themes, and so forth. Other significant facts such as the pupils' attendance and health records and information about his family were also available. Other information requested of teachers included weekly lesson plans, grade books, and copies of letters or notes from parents and/or principals.

There were then two things to consider in the development of the simulated program. One had to do with the gathering of various types of data which would help the student develop a reasonable understanding of and feeling for what was taking place in the community, in the school, and particularly in the simulated classes. Here the focus would be on observation. The other kind of data would be those in which a problem was involved, or at least in which some kind of action or decision by the teacher was required.[32]

Early in 1966, efforts were concentrated on the collection and production of materials. Meetings were held with each respective principal and classroom teacher who was cooperating in this phase of the project. The decision had been made to use two classrooms, one at the intermediate level and the other at the primary level, for purposes of data gathering. Early focus was on collecting materials illustrating actual work of students, primarily in the areas of language arts, mathematics, social studies, and science. A photocopying machine placed in the Griffith elementary school made it possible to copy materials before as well as after they had been evaluated and marked.[33]

Arrangements were made to do filming during the month of April. One day was spent in each of the two classrooms for this purpose. Additional slides were taken of the simulated classrooms and of their respective schools. Many slides of the community had been taken previously during earlier visits to the community.[34]

In May attention was directed to the development of audio tapes. A list of the topics for "critical incidents" was developed by the EAPT and sent to the cooperating faculty members at Griffith for their reaction. Some of the incidents, of course, had never occurred in the actual classes. Other incidents had taken place and could well serve the purposes of Insite's simulated program. Dr. Buffie and Insite audio-visual personnel went to Griffith for two days for the purpose of audio taping. Discussions were held with each principal and teacher regarding the final selection of incidents to be taped.

The tapes were developed so that they could be used in two ways: (a) to introduce a problem, or (b) to follow up a problem that had been presented to college students earlier (the concern being the solution rather than the introduction of a problem).[35] Other tapes involved discussions among the superintendent and his principals regarding various community and school matters.

The Materials that were Produced for the Simulation

For production purposes, two schools and two classrooms were selected. One school was a very, very old building which at one time housed all of the elementary and secondary students in the entire

community. The other school had been built within the last five years. There were, of course, some rather marked contrasts between the facilities of the two buildings. For purposes of film production and collection of "critical incidents," two classroom teachers were selected, one from each building. One teacher who taught at the fourth grade level, was an experienced teacher of some seven or eight years and had a rather relaxed style of teaching.[36] The other teacher was a second grade teacher in her second year of teaching and was very highly organized.[37] Films, slides, and audio tapes were produced in each school setting. These are described in detail below.

Motion Pictures: Four films were produced, two of each class. These films run approximately 20 minutes each. For each classroom, one film depicts a typical morning's activities, another the afternoon activities. Nearly all aspects of the curriculum--including the appearance of special teachers for music and art and the physical education activities directed by the classroom teachers--have been dealt with at one time or another throughout the school day.

Film Clips: In addition to the four films, there is also available a short film clip of three or four minutes in length. This excerpt is taken from the actual film of the fourth grade class at work. In this excerpt are three "critical incidents"--situations which require action by the teacher. In one situation a boy accidentally hits a girl in the head with his chair as he is carrying it to the reading circle. Another incident involves a boy who is cleaning out his desk during the middle of a class discussion, and the third incident relates to a boy

searching through the teacher's desk. This excerpt is used during the simulation week as one example of situations requiring immediate decisions on the part of the teacher.[38] In this situation college students see the actual results because each situation actually occurs in the film itself, showing how the teacher handled it.

Slide Transparencies: In addition to the films, hundreds of 2 x 2 colored slides were taken of every aspect of community and school life.[39] Through slides themselves it was found that one can learn a great deal about the community as well as about the schools and their operation.[40] In addition to the slides and films, a special slide-tape presentation was developed. An audio tape contains a running commentary of the older school provided by Robert Kurtz, principal of Franklin Elementary School. A complete tour of the school facilities and grounds is provided by the color slides. The tape narration was edited to fit the slides showing the school. This presentation runs approximately 15 minutes in length.

Audio Tapes: Each classroom teacher cooperated in the production of two audio tapes. On one tape the teacher provided background information on a number of her students. Most often these were students who had some kind of problems that caused her to be concerned about them, such as poor academic work, behavior, grading, or some physical ailment. An effort was also made to get background information about the average and extremely capable students as well. The other tape deals with actual situations and/or critical incidents that occurred during the academic year in which these materials were being produced or collected. In the preparation of this second tape, teachers, administrators, and parents participated in various role-playing situations.

It was through the use of these tapes that many of the critical incidents were introduced. These incidents dealt with such matters as grading, promotion or failure, swearing on the playground, academic difficulties, calling the teacher by his first name, and so forth. One of the actual transcriptions used in the Insite program is presented in Figure 4.[41]

III. W--

Mrs. C (teacher):	W is really working up to his potential and making fine progress.
Mrs. J (parent):	How do you determine this potential?
Mrs. C:	Oh, we have several achievement test scores and I.Q. scores. They're quite accurate and give us a pretty good picture of what to expect of each child.
Mrs. J:	What is W's I. Q. score?

Fig. 4--An example of one of the transcripts taken from an audio-taped "critical incident."

In addition to the above tapes, interviews were held with the principal of each building and with the superintendent. Each principal spoke specifically about his individual building situation--the facilities, background, and capabilities of teachers and pupils, educational program, personal philosophy, school policy, and so forth. The superintendent focused his comments more broadly on the community at large and

the relationship of the school to the community.

Materials Used Directly as it Came from the School: Besides the materials which actually involved production, a great many materials were simply reproduced. A Xerox machine was rented and placed in the school system for a period of two months. In addition to cumulative folders, the actual products from the pupils were copied before and after the teacher had evaluated the students' work. The materials that were reproduced included reports, texts, themes, routine assignments of various types and communications from parents and administrators. Actual last names of parents and children were, of course, removed from all printed matter used by the college students.[42]

In-basket-out-basket Materials: The materials received via communications from parents, administrators, and other professional and non-professional personnel were used in the development of our in-basket-out-basket materials. These items were used in a variety of assignments to stimulate decision making. Such materials as the following typically cross a teacher's desk and require action of some type or another. Some of the situations described in this set of materials are represented in Figures 5 through 8.

The School Survey and the Sociological Study: In addition to the materials which were reproduced for use in the teacher education program, two other publications were also used. The first of these was a school survey conducted by Indiana University, while the second publication consisted of a sociological study of the community.

SITUATION 1

One morning shortly after school opened in the fall Miss Ewart found the following note in her box.

Dear Mrs. Ewart

This is to inform you that while cleaning your room yesterday, I wasted much of my time.

1. The room had paper on floor
2. The desks were not in straight rows.
3. The shades were not all pulled to the same height.

Carl Stevens

P.S. - I sent a copy of the note to Mr. H

Please be prepared to describe: one, your immediate reaction to such a note; two, the various action alternatives you would consider in this situation; three, the possible consequences of each alternative; and four, your decision and subsequent action.

Fig. 5--An example of a Situation utilizing the In-Basket approach.

SITUATION 5

Most states have compulsory attendance laws which require pupils to be in school between the ages of 6 and 16. Generally speaking, pupils may be absent from school only for reasons of personal illness or religious observance.

In Griffith, school policy requires that parents secure permission before taking pupils out of school for reasons other than the above. During the 1965-66 school year Mrs. Chandler and Miss Ewart received the following notes:

Judy was absent from school last Tuesday and Wednesday because we were out of town on vacation.

Mrs. Ryd

Not arranged before.
r.a.e.

12-11-65

Miss Ewart,

Carl will be absent all of next week. My mother is gravely ill and we are going to her home.

Mrs A

Dear Mrs. Chandler,

He and Jerking a musical meeting, so Jo Ann will be absent Tuesday of this week and Monday, Tuesday, and Wednesday of next week.

Sincerely
Mrs. Donald B

I doubt the seriousness of the illness. If it is so grave Carl should home immediately don't you think? E.E.

Pre-arranged absence.

What action would you take regarding these notes? Notice that the second note has been sent to Mr. Hanak and returned with his comment.

Consider the following: What responsibility does the teacher have to help pupils with "make-up work" in each case?

Fig. 7--An example of a Situation utilizing the In-basket approach.

SITUATION 7

The following is taken from an actual conversation between Mrs. Chandler and Mr. Kurtz (principal).

"This morning during some of our morning exercises Greg walked behind my desk and just casually remarked that he hoped that this time he wouldn't have that 8 in reading, that he needed all A's on his report card in order to get that $5.00 from his dad. He just walked right on past me and back to his seat."

Had this happened to me, I would_____...

SITUATION 8

One day in March, Mrs. Chandler gave her fourth grade class 20 multiplication problems to solve. The assignment involved multiplying two, three, and four digit factors by a one digit factor. She was particularly interested in her pupils' ability to regroup (also known as "carrying") accurately. Computational accuracy was also of interest to her.

See Appendix A. "grade" each paper (key provided).

Once the above assignment is completed, you will be shown the actual "graded papers."

Be prepared to discuss the following questions: What distinction, if any, should be made between grading routine assignments, such as this one, and tests or examinations? After analyzing the results of this assignment, what would you see as the next instructional step?

SITUATION 9

Not uncommon for the beginning teachers is a situation such as the following.

"I suppose that I do have an unusual first name, Omar. I find that when the children actually leave the building they turn around and say, 'good-bye Omar,' or as they go by the window they yell at me, 'see you later, Omar'."

Had this happened to me I would_____...

Fig. 8--An example of three situations utilizing the In-basket approach.

Simulation in Action

As indicated previously, this program package of simulated materials was designed for a 25 hour block of instruction and was used to introduce the acroclinical semester. It was, in fact, the foundation on which everything else was built--the professional study and student teaching activities. In addition to the class instruction, students were required to do some outside work. This usually referred to the reading of handouts (the IU and Purdue studies) or the preparation of written statements regarding the solution to critical incidents. The following section describes the classroom organizations which were employed during the simulation.

Modes of Organization

Different types of classroom organization were used during the simulation period as well as throughout the academic semester. For certain purposes, large group sessions appeared to be ideal. "Large group" in this case usually referred to a student body numbering from 25 to 45 students. For other activities in which maximum student participation was desired, the large group was subdivided into four smaller groups for inquiry-discussion purposes. These groups ranged in size from six to twelve students.

During the initial states of the simulated work, focus was on hypothesizing, making observations, and generalizing about the simulated community and its schools. Once the general background of the community and its schools had been accomplished, focus was on various types of

situations which actually occurred in this school system. Generally speaking, none of the incidents utilized in this program related specifically to instructional procedures used by the teachers in direct face-to-face contact with pupils. Rather, attention centered on those kinds of activities that typically relate to the beginning teacher's experience--for that matter, on situations that constantly occur in the experience of all teachers. The kinds of situations depicted were seldom dealt with to any appreciable degree in the regular conventional teacher program. The following sections summarize the sessions and daily activities for the week of the simulation.

The First Day

Because the first day of the simulated program was also the introduction to the acroclinical semester, it was necessary to provide some sort of general orientation to the entire program at this time. The diagram in Figure 9 illustrates an outline of the first days activities.[43]

Monday

A.M. Introduction

"Welcome to the Insite Acroclinical Semester"
Dr. Arthur Rice, Executive Coordinator

Introduction of Faculty, Overview of Program, and Some General Comments, Dr. Edward G. Buffie
Associate Coordinator for Elementary Education

Campus Orientation Tours, College Interns

"Readiness for Simulation--The Dimensions of Teaching"--An introductory lecture

P.M. The Community

Lead question: If you were going to live in a different community, what things would concern you?

List suggestions on transparencies: e.g. housing, job groups, religions, cultural and recreational facilities, politics, social problems, etc.

Study of simulated community by means of maps, slides, transparencies, and tapes.

Discussion of first impressions in terms of initial expectations as identified in question.

Use of tape excerpts from school superintendent to provide additional information or to verify initial hypotheses and/or observations.

Assigned readings:

I.U. Survey: "A Cooperative Study of the Public School of G_____, Indiana."
Purdue Sociological Study: "The Study of Social Change in G_____, Indiana."
(These should either substantiate observations or provide additional information about the community.)

Fig. 9--An outline of the first day's activities of the simulation program.

The introduction to the simulation program consisted of the first and only lecture during this phase of the acroclinical semester. The lecture was entitled "Readiness for Simulation--The Dimensions of Teaching." Using the work of Anderson and Bruner as primary bases for commentary, the teaching profession was contrasted to other professions, particularly that of the medical profession at the turn of the century. Various stereotypes of "successful" teachers were described. Students' attention was directed to three major aspects, or dimensions, of teaching; the learner, the teacher and the curriculum. The abilities of observation and diagnosis were the skills that were emphasized throughout the simulated phase of the students' work.[44]

The afternoon session was devoted to an analysis of the simulated community and, in a sense, the real thrust of the acroclinical semester was underway.[45] After the introductory lecture, nine distinct sessions followed with focus beginning on the community and centering more specifically on individual schools, classrooms, and children.

The first session (P.M.) focused on the simulated community. The stated purpose of the session was:

> As a result of this experience students identify with the simulated community of which they will be a part during simulation sessions.

The media and procedures used are described in Figure 9.

It appears that at the close of the experience students were beginning to become involved with the life of the community and to evidence concern about its strengths and weaknesses in relation to family living.[46]

The Second Day (Sessions II & III)

The focus for the second session (day two, A.M.) was The Schools. The stated purpose for this session was:

> As a result of this experience students begin to study the schools of the community from the point of view of the teacher making a decision about joining the faculty.[47]

The focus for the third session (P.M.) was The Classrooms. The stated purpose being:

> As a result of this experience students identify with teachers and children in the simulated classrooms and become involved in solving problems created by selected "critical incidents."[48]

The diagram presented in Figure 10 presents the schedule of activities for the second day.[49] It was found that

> During the third session students were able to confirm or reject earlier conclusions at which they had arrived regarding the simulated schools on the basis of additional information afforded them by the films. Their involvement in the "critical incidents" further intensified their identification with both pupils and teachers.[50]

The second session involved the students further in the life of the community and its reflection in the schools.

> Most of the students began to have a special interest in one or the other of the schools as they reacted strongly to the principals and to the physical setting. They were intrigued by the "critical incidents" and eager to explore the problems suggested by the film clips.[51]

Tuesday

A.M. The Schools

Lead question: If you were going to teach in one of the schools in this community, what things would you hope to find?

List suggestions on transparencies: e.g. physical facilities. . ., pupil services, speech and hearing programs, instructional resources, A-V materials, library, professional materials, supplementary teaching material. . ., inservice programs, etc.

Introduction of the two schools to be studied.

A. F_____ School
   (1) 15-minute slide type presentation describing the school
   (2) appropriate excerpts from the principal
B. W_____ School
   (1) slide presentation and discussion in terms of initial expectations
   (2) appropriate tape excerpts from principal

(small groups)

Discussion of the two schools covering such questions as these:

A. In what ways were the schools alike and different?
B. What evidence was given to show or imply that the schools were meeting the needs of the community?
C. Was there any evidence that the atmosphere in the two schools was different? Explain.
D. In which school would you prefer to teach? Why?

Introduction to filmed excerpts of two critical incidents

A. Desk cleaning situation
B. "Cracked head" event

Assignment to be written:

The following guidelines were used in reacting to the critical incidents:

A. Possible alternatives of action one could take
B. The consequences of these alternatives
C. The action you would choose and justification for this choice

P.M. The Classes (small groups)

Discussion of assignment on the two critical incidents

A. Discuss possible causes of the incident in terms of its being "critical."
B. Analyze possible alternatives and supporting rationale as well as their consequences.
C. Choose one position representative of the groups best choice.

Reports on best ways of handling critical incidents from one student from each group--reacti from total class to follow each presentation

Films (Part I--morning sessions) of Mrs. C. (F_____ School) and Miss E. (W_____ School) in action in the classroom in order to

A. See how the critical incidents were actually handled.
B. Introduce the simulation of two differ teachers and their pupils.
C. Contrast the two classroom situations.

(small groups)

Discussion on contrasting the two classes in terms of

A. Opening activities
B. Teacher-pupil learning situation
C. Motivation
D. Teacher's expectations regarding pupil academic performance and social behavic

Transitions from one activity to another (proc dures, pacing, etc.)

Learning environments--bulletin boards, use of shelves and corners, learning centers, etc.

Assignments to be written:

Reactions to the following two critical incide (introduced with tapes) using the guidelines p viously mentioned:

(1) S_____ swearing
(2) B_____ copying from the encyclopec

Fig. 10--An outline of the second day's activities for the simulation program.

The Third Day (Sessions IV and V)

Sessions IV and V were both focused on the students. The purpose for these sessions are as follows:

> Session IV: As a result of this experience students enlarge their view of available sources of information about pupils and begin to use this information in decision-making about pupils.[52]

Session V: As a result of this experience students have further opportunities to see pupils as individuals and to recognize the need for meeting individual differences.[53]

The diagram in Figure 11 presents the schedule of activities for Session IV and V (Wednesday A.M. and P.M.)

Wednesday A.M.

The Pupils

Discuss assignment--course of action, consequences, rationale

Presentation of "best" procedures for handling critical incidnets followed by these activities:

A. Listen to tapes describing the background of the two pupils.
B. Re-evaluate previous decisions in light of new information.
C. Listen to tape describing the teacher's actual handling of the two incidents.

Individual analysis and small group discussions of class materials:

A. Cum folders
B. Standardized test scores (composite)
C. Class schedules

Discussion of class material--focus on

A. General observations of pupils' background
B. Past academic achievements
C. Intellectual potentials

Gradual presentation of J_____ case-study in order to arrive at a pass or fail decision, beginning with a taped teacher-principal discussion of the decision to be made. (Each of the four groups of students were progressively given additional information and instructed to make a judgment to pass or fail J_____ utilizing a -5 to +5 point scale based on the information given their group.)

A. Group 1--no information given other than previously provided via films, slides, and cum folders
B. Group 2--in addition to Group 1's information, given authentic examples of J_____ school work, e.g. science test, math, language arts and social studies papers (for the most part unreadable)
C. Group 3--in addition to the above, viewed a transparency of a note from J_____ mother stating problems with poor health and explaining problems relating to J_____ previous webbed fingers
D. Group 4--received the remainder of the total picture, a seven-minute taped description of J_____ background

P.M. Student reports on four groups' decisions to pass or fail J_____

A. Sharing of total information given in morning session
B. Discussion of criteria to be used for arriving at pass or fail decisions in general

Continued analysis of pupils in the total classroom situation--presentation of C_____ and F_____ films (Part II--afternoon sessions) followed by discussions of pertinent questions:

A. What provisions were made for individual differences?
B. In what ways were the two teachers different?
C. What might be happening during times not viewed in the film?
D. What impressed you either positively or negatively concerning individual pupils?
E. How would you compare certain pupils' performances in the films to their data in the cum folders?
F. Would you have handled any of the classroom situations differently? How?
G. In what ways might J_____ have been dealt with differently by Miss E. or by you as her teacher?
H. In what room would you prefer to be placed as a student teacher? Why?

Assignments to be written:

Reactions to the following in-Baskets Out-Baskets item:

A. Relations and attitudes toward non-professional personnel (Situation 1--note from the custodian)
B. School policies
   1. Tardiness (Situation 2--over-sleeping mother)
   2. Absences (Situation 3--chicken pox, swollen glands, and mumps)
   3. Vacations (Situation 5--3 examples)
   4. Make-up work (Situation 5)

Fig. 11--An outline of the activities for the third day of the simulation program.

The Insite staff discovered that

> As students learned more about pupils, their interest in individuals heightened and their insights about needs emerged. They began to center their discussion on causes of behavior and to look more deeply for possible explanations.[54]

It was also discovered that

> Viewing additional films of the two simulated classrooms after attention had been given to information about individual pupils proved to be a useful way of stimulating reaction to the problems teachers experience in working with a group of pupils who vary widely in physical, social, emotional, and intellectual characteristics. The introduction of the in-basket items, especially the custodian's note, opened up the whole area of relationships among faculty and staff.[55]

Fourth Day (Sessions VI and VII)

Session VI focused on School Policies and its purpose was.

> As a result of this experience the student recognizes the usefulness of policy statements in solving school and classroom problems.[56]

Session VII focused on The Pupils and Their Parents with the stated purpose being

> As a result of this experience students take the role of teachers in responding to the concerns of parents and to discover patterns of relationship existing within the class group.[57]

The diagram in Figure 12 presents the schedule of activities for these two sessions (Thursday A.M. and P.M.).

Thursday A.M.

Inter-Personal Relationships and School Policy (small groups)

Discussion of previous assignment

A. Various ways of dealing with each situation described

B. The group's decision and supporting rationale

Reports from small group discussions on inter-personal relationships and school policies

A. Focus on teacher-pupils responsibility for physical environment of school and relationships with other professional and non-professional personnel

B. Discuss School Policy (contents) relating to pupils in terms of

illness	loss of school material
tardiness	administering first aid
homework	supervisors and visitors
grading	play ground areas and equipment
accidents	vacations during school year
fieldtrips	early dismissal

Discussion of implications of above items as related to student teaching and resident teaching assignments

P.M. Learning About The Children We Teach: Parent-Teacher Relationships (small groups)

Discussion of parent-teacher relationships from In-Basket Out-Basket items

A. C_____ mother (Situation 4--response to attendance at education program; implications of concern)

B. M_____ mother (Situation 6--description of doctor's recomaendations)

C. G____ grades (Situation 7--grades and money-making)

Exploring techniques for learning about pupil-pupil relationships

A. Use and interpretation of sociograms

B. Discussion of how contact patterns vary

Fig. 12--An outline of the activities for the fourth day of the simulation program.

It appears that meeting practical problems in light of established policy intrigued the students and stimulated lively discussion. "It was most interesting to note how indepth discussion of the in-basket items produced changes in the approaches students decided to take to solve the problems posed by various items. Writing simulated replies proved to be an exacting task."[59]

The staff found that it was quite apparent at the close of session VII that students had begun to realize that teaching is more than working with pupils, that working with parents is sometimes an important factor in the child's performance at school. The socio-grams, contact patterns, and discussion charts offered a change of pace to the session and stimulated extended analysis and discussion. At this point the students were responding more and more like the teachers they were preparing to be.[60]

The Fifth Day (Sessions VIII and IX)

The focus of Session VIII was on the pupils and their work. The stated purpose for the session was

> As a result of this experience students sharpen their perception about the problems of analyzing and evaluating pupil's work.[61]

Session IV was the culminatory activity and it centered on "from simulation to assimilation and reality." During this windup the students' attention was directed to the importance of simulated experiences (a) as preparation for student teaching activities and (b) as an introduction to the professional study of pedagogy.[62]

The diagram in Figure 13 presents the schedule of activities for these final sessions.

Friday

A.M. Instructional Concerns
Discussion of paper-grading assignment
A. Compile a composite of student teachers' grades for each pupil's work
B. Discuss reasons for variations in grades by discussing the criteria and different standards used for parking papers

P.M. From Simulation to Assimilation and Reality (A Culmination)
Simulation experiences and their implications fo student teaching

Simulation experiences as an introduction to the professional study of pedagogy

Summary and evaluation

Fig. 15--An outline of the activities for the fifth day of the simulation program.

Session VIII opened the whole problem of pupil evaluation--grading, reporting to parents, and the bases for both. Standards for grading which the students had employed revealed much of their own school experiences, and the great variation in results impressed them with the degree of subjectivity which goes into the evaluation process.[63]

With these sessions, the simulation experiences were brought to a close. The students had become quite immersed in their schools, quite involved with their pupils, and rather used to assuming the thought processes of the teacher. Connecting this attitude to the study of methodology and to practical classroom participation became immediately possible.[64]

During the summary and evaluation period the students, divided into several groups, were asked to consider one of the following questions:

1. How have your ideas about teaching children been influenced by the simulation experience?
2. To what extent has simulation activity sharpened your awareness of the needs and characteristics of children?
3. What cautions or warnings have become apparent as the result of exploring the simulated community?
4. To what extent have you developed a sympathy for the problems which confront teachers as they deal with children?

All groups were asked to identify and consider questions that came to mind as they tried to translate their simulation experiences into anticipation of student teaching.

The Secondary Teacher Education Program

There were some similarities in the use of simulation within secondary and elementary portions of the Insite Program. On the other hand there were some major differences. These similarities and differences are described in the following sections.

The Secondary Acroclinical Semester

The secondary Acroclinical Semester combined student teaching, methods, and principles of secondary education into a one 16-week semester.

Five major subject areas were represented in the acroclinical semester on the secondary level. These were English, science, mathematics, social studies, and modern foreign languages. Prior to entering the acroclinical semester each student would have completed 90 or more hours of work toward his bachelor's degree (124 is required for graduation). Of this college work approximately 30 hours would be in the student's major area. In addition to the general education requirements, work in his major, and work in his minor, the student would have completed a course in Human Growth in Learning as well as the three Insite seminars which are described in the report on simulation for students preparing for elementary school teaching.

The instructional pattern for the acroclinical semester was as follows: [65]

> Phase I (first four weeks): Phase I was designed to teach the student to observe classroom instruction effectively and to plan a lesson or a unit of instruction in keeping with stated

goals and objectives. After a consideration of long-range goals, performance objectives were introduced; and the student was taught to plan for both.[66]

Phase II (second four weeks): During this phase the student moved from observation to a more active role in the classroom in which he participated, assisted, and taught on a limited scale. From a consideration of goals and objectives emphasized in the first phase, he moved toward preparing varied activities in keeping with his abilities and needs. He began the work in statistics, tests, and measurements required to assess student performance effectively.[67]

Phase III (third four weeks): Student teaching itself was the main activity during the third phase. The methods teachers met weekly with the students in their methods sections, organizing their instruction around the actual problems faced by the students.[68]

Phase IV (Fourth four weeks): Although the student continued to teach during a large portion of this phase, he returned to special methods and principles classes for further work on evaluation of student performance, and--after a sampling of the teacher's life--a close look at the profession itself. During the last week of the semester, the secondary students participated in the "Capstone" experience, during which the students dealt with some of the problems facing the beginning teacher.[69]

The acroclinical semester is followed by a program similar to that described in the earlier section of this report (elementary program). Those students electing to go on into resident teaching do a full semester of teaching in one of the cooperating school districts and then return to campus to take additional work on their master's degree, and the six hour follow-up course called Graduate Study of Teaching, in which elementary and secondary teachers are again put back into the same section. The M.S. in Education degree requires 36 hours of work, 15 of which would be for resident teaching, six would be graduate study of teaching, and up to 15 graduate hours in the student's chosen major subject area.[70]

The "Capstone" Experience

As it was employed in the acroclinical semester, the Capstone experience was a concluding type of experience for the semester. It followed methods, principles and student teaching. The Capstone experience was an attempt to encourage prospective teachers to tie together their experiences in the acroclinical semester and to project themselves into their role as a beginning teacher in an actual system.[71]

The Capstone was a summarizing, a testing. It had the student play the role of a beginning teacher in contrast to the role of a student teacher.[72]

As used in the secondary phase of the acroclinical semester, the Capstone experience asked students to make decisions for which they had become, hopefully, equipped to make. The wish was for them to be able to make decisions as a beginning teacher who would already have had the experiences of student teaching and methods course work.[73]

This section deals primarily with the Capstone, but also includes a description of those introductory activities which come under the general heading of "simulation." Some cases, based on actual experiences of student teachers, were used to stimulate discussion during the introductory phase of the acroclinical semester.

In addition to the introductory cases (simulating the student teacher experiences) and the Griffith material (simulating the beginning teacher's role), a portion of the Capstone was devoted to a study of cumulative records collected in a large city senior high school.

The Simulation Experiences in the Introductory Phase

The simulated experiences used in the introductory phase of the acroclinical semester, rather than being based on a specific situation in Griffith, were based on hypothetical situations that might occur in any school. Thus, they were calculated to help the prospective student teacher make the transfer from the role of college student to student teacher. The class was asked to make a series of decisions confronting a student teacher. An example of this kind of activity will illustrate:[74]

Case #1

The student is getting out of his car and as he begins to walk toward the senior high building he notices a young boy, probably a junior or senior in high school, slumped against the physical education building. The student goes over to the boy and asks if he can help. The boy looks up at him and says, "I'll be all right in a little bit, please do not report me. Just go on in and pretend you didn't see me."

The college student was asked to make a decision as to his next action and to develop a rationale for that action. Some interesting discussions ensued from this simulated case. The simulation experiment tried to get the class to define for itself an attitude and a way of operating which puts the health and safety of the high school student above any other concern. Many obstacles seemed to appear in getting the student teacher from thinking clearly about the physical help for the child.[75]

The situation could be changed by having the students compare their decisions in the light of new evidence. For example, in Case No. 1, as

the student approaches, the boy says, "Please go on in. I'll be alright. Some boys dared me to drink a cup of whiskey on the way to school, and I'm sick, but I'll be okay."

Now the college student was asked to give his next step. In this particular case one could analy e whether the fact that the boy had misbehaved by drinking whiskey was the essential factor in his being reported, or whether the welfare of the youngster was, indeed, the most important element.

Another illustration of the kinds of simulated situations used at the beginning of the acroclinical semester is the following:

Case #2

> Your critic (supervising) teacher has told John B. the next time he comes to class late he cannot be admitted without a slip from the principal. Several days later your critic teacher is called to the office during the third period class and asks you to take over until she returns. You finish the third period lesson and, since she has not returned, start the fourth. Fifteen minutes after the fourth period begins, John B. comes in. You do what?

The prospective student teacher was now confronted with analyzing some of those relationships he hopes to establish with his critic teacher.[76]

One could alter the situation in this case considerably if one said the critic teacher was to be absent from the class for several days.

Other cases included:[77]

Case #3

As you walk into your classroom, two girls are having an argument. One of the girls calls the other "a dirty S.O.B." The girl retaliates with a slap across the face. Since your critic is not there, you do what?

Case #4

As you are handing out study guides for the unit you are introducing, you answer a knock at the door. A student hands you the following note: "I am terribly sorry to ask this favor, but I need Anita M. and Barbara F. this period. It is the only period today the stage will be available, and we must practice their number prior to tonight's performance. Many thanks. (Signed) Mr. Elliot." You do what?

Case #6

As you are going to your car near the Physical Education building, 15 to 20 boys are throwing snow balls while waiting for the buses. The teacher "on duty" is not there. You do what?

These are only a few of the cases which were utilized prior to the student teaching experience.

The Beginning Teacher Simulation Package

The Griffith materials were collected in order to allow for the simulation of a beginning teaching experience in an actual school system. The student analyzed the community from various data presented, and was then faced with a series of problems in which he needed to make some decisions as to his course of action.[78]

Griffith was used as the school district because it is not so large or so complex as to be difficult to represent clearly to the prospective teachers in the class. On the other hand, Griffith did not represent the "kinds" of districts in which the students would like to become beginning teachers. This may appear to be quite a contradiction to the reader, but the amount of time available for the Capstone experience in the acroclinical semester was limited. It was important not to represent a school system and city so complex that it would be difficult, if not impossible, to get students to make considered decisions because of the complexity of the setting.

The slides of the Griffith community, the audio tape in which the superintendent talks about Griffith, and the two written reports (all used for the elementary program) were also used in the secondary program. They were presented in a very similar manner.

They found that the tape recordings prepared by the superintendent appear to be an effective way for the student in the Capstone class to learn more about the community. Listening to the chief school administrator discuss Griffith seems to be more effective than merely reading written reports.[79]

Two series of slides were developed which portrayed the secondary schools of Griffith. These were used in a similar manner as the slides for the elementary school.

Several situations were provided for the secondary students during this portion of the simulation. The following are some examples of these situations:

Administrators Discuss Applicants in order for the principal and superintendent to discuss two different kinds of teacher applicants a situation was created for them prior to tape recording their comments. The situation is as follows: Two applicants for a position are requesting interviews. His critic teacher describes one:

> David is the most thoroughly organized student teacher I have ever had in my room. From the first day, I was constantly impressed with the detail of his planning. When he started actually teaching the classes, I found that he had each day's activities carefully planned for the rest of the eight weeks! The planning included approximate times to be consumed by each activity and the necessary study guides, assignments, instructions, work sheets, etc. were already dittoed and run off. Periodic quizzes and a unit exam were similarly ready for use. He not only planned his work, he worked his plan.
>
> I found that his excellent academic record at college was an accurate reflection of how well he knew what he was doing, where he was going, and what it took to get there.

The other applicant is described as:

> Harry's high college grades show that he has a love of studying unusual in college students, at least of the students I've had as student teachers. In class I found him to be imaginative and enthusiastic to an amazing degree. The students, though a little overwhelmed at first by his "romance" with books, reading, and dialogue, could not help but be caught up in the spell he wove. Since I could not do it nearly so well, I'll admit to some discomfort as I watched him take a student's question, make it an important one for every student in the class, then lead the student to some work or author who had some of the answers to his query.
>
> Lesson plans were made merely to acquire some semblance of order (and I suspect, because I required them), but the interests of the students came first. I had to interrupt very few times -- once it was to stop a discussion of middle-class morality to remind Harry and the class that it was 9-weeks test day and report cards had to be in Monday -- after the test was taken and corrected. Poor Harry! I know he spent many hours that weekend reading those essay answers!

The tape recording begins as the principal of the high school and the superintendent discuss which of the two young men they want to invite to Griffith for a personal interview. Students are asked to speculate on the basis of what they know about the superintendent which candidate he would lean toward.[80]

The tape concludes with the impression that both young men possess many strong traits and that they both will be asked to come over for an interview and that a selection will be made after these interviews.

Later in the Capstone experience, students would be asked to assume the role of one of two teachers in Griffith possessing these widely divergent teaching styles. In other words, they were asked to play the role of a teacher coming into a classroom in which a distinctive teaching style and way of doing things has been clearly set.[81]

Another tape recording completed by the high school principal and the superintendent concerned the following case:

TEACHER SELECTION: THE BEGINNING TEACHER

Miss Alice Jenkins is described as follows:

"Miss Alice Jenkins has been recommended for a position in Griffith by a neighboring superintendent. Miss Jenkins graduated at mid-year and has taught just one semester. During this semester she was unable to cope with several unruly classes or to work effectively with her peers. The neighboring superintendent is quick to point out that they probably didn't give her enough help and thinks with proper supervision she'll do a fine job. On three different days when she was ill, the substitute found very inadequate lesson plans and reported this to the principal. The teacher she replaced for a semester has resumed her teaching job and there is no vacancy for Miss Jenkins at the nearby school. In an initial interview, the superintendent found Miss Jenkins to be very personable, intelligent, and interested in teaching in Griffith."

A. (Before the tape) Would these administrators be interested in her?

B. What are *major points* for the beginning teacher to be aware of which are brought out in the discussion concerning Miss Jenkins?

As the tape begins, the superintendent and principal are discussing whether they should employ Miss Jenkins. This case allows the superintendent and principal to bring out several particular concerns regarding the beginning teacher.

The high school principal mentions the three "cardinal sins of beginning teachers" which are (a) inability to bring about good discipline in a classroom, (b) inadequacy of lesson plans, and (c) inability or unwillingness to cooperate with peers.[82]

Both men comment that one should not always judge a beginning teacher too harshly if the previous employer has been willing to recommend that person for another job. Major points in the tape were that she probably wasn't given enough help and probably will do better with more supervision.

Other areas in which experiences were provided are as follows:[83]

The "OUT" Group Case The prospective teacher in the class was asked to assume that he was a beginning teacher charged with serving on a committee to develop additional extracurricular activities which might appeal specifically to some of those youngsters in high school who were not participating. In order for them to become better acquainted with some of these students, they were asked to listen to a tape recorded interview with two senior boys who had not participated in activities in the school for a considerable period of time. (In fact, these boys considered themselves in the "out" group in Griffith and were well aware of this when the tape recording was made at the high school in Griffith.)

The boys bring out several reasons for not participating such as jobs, wanting to smoke, and cliques in the school. The tape ends with a rather pessimestic note as to whether the high school can and indeed should provide activities to interest every young person.

Examination of Prejudice Another segment of the project allowed the students to investigate evidence of racial prejudice and to examine his own views of the teacher's role when confronted with such evidence. Students were given a collection of papers which actually had been written in an English class at Griffith and titled "The Negro and I." The assignment was intended to include the following points:

1. Do you think that Negroes are equal to or inferior to whites - why or why not?
2. Do you think Negroes should have equal legal rights such as voting - why or why not?
3. How would you feel if Negroes were in class with you?
4. How would you feel if a Negro family moved next door to you?
5. How would you feel about having Negroes in your social group, sharing in your parties, games, etc?

The assignment indicated that the teacher did not intend to grade these papers. The acroclinical students were asked to assume that they have been placed in charge of the class in which this assignment was made. In other words, they assumed the role of beginning teacher in a class in which the first semester was already complete and they were taking charge at the beginning of the second semester. They were asked to take the papers home overnight and make any marginal comments on them that they wished prior to handing them back (without grades) during the

high school English class the next day.

The discussion in the Capstone class dealt with the rather troublesome question of how to confront prejudice as it exists in a high school class.

Parental Relations After the students' marginal comments (or lack of them) have been analyzed in class discussions on the previous incident (prejudice) each student in the class is given a copy of the following:

> You receive a note: [The following appeared as a hand-written letter in the exercise.]
>
> Principal,
> Griffith High School
> Griffith, Indiana
>
> Dear Principal,
>
> I wish to object to the assignment given recently in 11th grade English concerning Negroes. I realize this is a timely topic, but I am sick to death of hearing about it, and I feel my daughter should not have to write about her feelings concerning the colored in an English class.
>
> I also realize this assignment was given by the teacher recently replaced, but I understand the new teacher has handed them back and discussing them in class.
>
> I would appreciate a note from him regarding his reasons for such an assignment and such a discussion.
>
> Mrs. E.W. Smith
>
> A. To what extent is the novice teacher committed to explaining/justifying assignments to questioning parents?
>
> B. Write your note to Mrs. Smith here:

Further discussion can center on whether a teacher should accept a teaching job in a community which reveals attitudes or values which he cannot accept.

Question of Organizations Two brief messages are placed in the teacher's mailbox concerning teacher organizations. They are both addressed to Marion Smith (the name to be used for the beginning teacher whose role is being assumed by the individual students within the class). One message was from the GEA membership chairman. It ended with the following:

> I do, I do not, intend to join the local, state and national professional organizations (GEA, ISTA, NEA) for the following reasons...

The other message was from the AFT membership chairman. It ended by stating:

> We would appreciate a note from you regarding your intentions concerning joining.

Students were asked to respond to both of the notes. Their responses were then analyzed through a class discussion. Many of the students, of course, object to having to answer to a teacher organization concerning his joining, and the reasons why. A crucial question remains: Can a beginning teacher remain neutral or aloof from the competition between teacher organizations?[84]

The Problem of a "Creative" Pupil This incident involved a series of rather complex situations. They were as outlined below.

1. Students are given a copy of an essay entitled "Wonderful is Worth Saving," which was written by Cynthia Milsap, a senior in high school. The teacher is asked to look over this essay and see if he thinks Cynthia has creative writing ability. The principal explains (the teacher is new to the system and has not had much opportunity to become acquainted with Cynthia) that the girl has been president of the

Future Teacher's Club and extremely active in high school. The school is interested in helping her obtain a scholarship because she comes from a large family without many resources.

Students were asked to take the essay home, read it, and be ready to express their reactions to it when they return the next day.

2. When they arrived the following day, they were given a copy of a note from the principal stating:

> Since you have had the opportunity to read one of Cynthia's essays and have some idea of whether or not she possesses creative writing talent, I'm going to ask you to make a short statement along with several other teachers to accompany a scholarship application for her.

Students then write a scholarship statement later in the class.

3. After discussing the statements in class they were asked to reconsider what they have said in the statement and submit it to the principal. Subsequent explanation made it clear that time was an urgent factor.

When the principal picked up the statement, he said:

> By the way, I saw Cynthia Milsap's mother in the grocery store last night and she told me how anxious they will be to find out if Cynthia can get a scholarship. With so many children and such limited resources they don't think there is much possibility that Cynthia could go to college without considerable help.

Principal's statement continued:

> I told her that in addition to our scholarship application we were entering Cynthia's essay entitled "Wonderful is Worth Saving" in a creative writing contest conducted by one of the magazines. Her mother hadn't heard about that, of course, since Cynthia may not know it either. Everyone in the twelfth grade English class submitted one and Cynthia's paper was selected without her knowledge.
>
> Her mother did say that Cynthia has been getting work done just in the nick of time lately, and has been staying up very late to do her homework. She believes that Cynthia is involved too heavily in school activities but takes them so seriously that she works until very late hours in order to get her homework done.

4. After the scholarship application statement had been sent to the principal's office, (i.e., collected in the class) the teacher received an envelope addressed to him and delivered to his door by a student who informed him that it had been left in the principal's office and was to be given to the new teacher, "Marion Smith." Students are asked to read the envelope's contents carefully, and then to jot down their next steps in specific terms. In the envelope was a page torn from Seventeen magazine which carried the essay "Wonderful is Worth Saving." It actually was written by a 19-year-old girl from Topeka, Kansas. Cynthia had plagiarized the article verbatim.

The students were asked to list their next steps.

5. In an attempt to see if students were influenced in their assessment of Cynthia's writing ability and their willingness to

recommend her for a scholarship by some suggestion of Cynthia's economic status, the instructor varies the information given the student regarding Cynthia's family. In one note, for example, the principal wrote to half the class: "Cynthia is from a large and very poor family and needs to get a scholarship if she is to attend college;" to the other half the note differed in that it stated at the end: "Cynthia is from a widely-traveled, extremely cultured family and they are anxious that she get into a good school, probably an Eastern women's college."[85]

Summary Discussion

After the various activities within the Capstone were completed, the instructor conducted a summary discussion, developed from how clearly he felt the class understood each of the succeeding steps. Central questions evolved as follows:[86]

1. What are the critical behaviors for the beginning teacher in Griffith, as brought out by community attitudes and the opinions of school administrators?

2. What are key relationships for the beginning teacher in a situation (administrator-teacher, teacher-teacher, teacher-pupil, teacher-guidance department, etc.) and what information about each of these might a beginning teacher wish to seek early in the teaching experience?

3. What special resources are available to the teacher in Griffith, both within and without the school setting?

4. What elements in Griffith are interesting to you as a beginning teacher and are there elements within the community or schools which you feel would prevent your being an effective teacher there?

After the instructor had several opportunities to use the simulations material with Capstone groups, he developed a format for students reactions to the various elements in the package of materials. He found

that the material was much more effective if students in the class kept a running account of t' ir reactions to the various information and problems confronting them within the study of Griffith. The reaction sheets used by students provide for space in which reactions are written.[87]

School City Cumulative Records

There were several important learning experiences for students in the Capstone class through use of cumulative records from School City. They were confronted with a sizeable package of information composed of grades, notes, test scores, etc. It became apparent to them that in order to make effective use of the cumulative record they must know how to interpret different sets of data.[88] Giving the students an actual record and allowing them to discover for themselves that there is much data in it which they are not yet equipped to interpret appears to be more important and a more effective way of conducting this learning experience than merely lecturing.[89]

A second important learning experience dealt with the fact that most of the information submitted by teachers to the cumulative record other than grades is negative in nature.

There were larger questions and ones which Capstone students demonstrated a willingness to discuss at length: What kinds of evidence should the teacher submit to the cumulative record? What criteria for submitting or not submitting information should be employed? An additional part of this latter question is "What kind of information should remain in the cumulative record over a number of years, what

kind should be weeded out, who is to weed it out, and, if it is not weeded out, how can the teacher learn to overlook extraneous information?[90]

In summary, the use of cumulative records in the Capstone experience is designed to sensitize students in the class to the importance of learning how to interpret data in the records, and learning how to contribute effectively to the permanent records of youngsters.[91]

Limitations in Use of Capstone Simulation Package

With secondary teachers there appears to be a built-in difficulty in using materials which provide for a simulated introduction to a teaching job in a particular community. This difficulty deals with the fact that a secondary teacher is going to be primarily concerned with one subject area. Consequently, the activities, problems, and experiences one wishes to simulate have to be of the nature that all secondary teachers would find of importance.[92] The major categories included in the Griffith material just described are essentially of this nature. They dealt with

1. selecting a community in which to teach
2. analyzing the secondary schools in that community to see if they would be an appropriate place for the individual
3. identifying factors concerning the beginning teacher which are deemed important by the administrators in the school district
4. dealing with parents concerning the curriculum
5. working with students who are not active in school
6. developing a rationale for ones choice of teacher organizations, and
7. making decisions in the case of serious student misconduct.[93]

These are all meaningful topics for the prospective teacher, but they do not necessarily add up to a realistic teaching assignment in the school.[94]

It appears that what is needed to make this sort of package more effective is to develop tasks within each of the major subject areas appropriate to the teaching of that subject in the given school district.[95] But even once this is done the teacher training institution faces the problem of scheduling and conducting all these various sections.

Mcquigg states a very important factor

> The teacher training institution hoping to develop a simulated teaching experience for the prospective teacher must be prepared to deal with the school community in considerable depth. A cursory look at the community, using a few photographs and perhaps some written material, does not provide the information about the community necessary for making good decisions. This kind of depth takes a great length of time, not only to develop or collect simulation materials within the community itself, but also to present them to the college class.[96]

Assessment of the Simulation Program In Center Project Insite

The following is a description of the assessment that was made of the simulation portion of the acroclinical semester. First the concerns of technology and then the observations and evaluations made by both the faculty and the students are described.

Technological Concerns

In general, the college faculty and technological advisers and consultants were very much pleased with the quality of the materials that were produced and the reproductions that were made. This was particularly true of the slides, audio tapes, and slide-tape material.

The use of the role playing technique in the introduction of critical incidents was very realistic and well done. The cost of development of these materials appeared to be very reasonable, particularly in view of the benefits derived from them in the program.[97]

The production of sound films was successful, but was confronted with problems. The films depicted a fairly typical school day in their classrooms and the children and teachers had not behaved or reacted in any unusual way.[98]

Normal classroom accoustics proved to be a problem in getting sound-on-film records. At times the background noises were quite distracting. Despite this obvious disadvantage, the use of such film is most desirable. It was the films which helped to make the children and teachers lifelike. "It is difficult to see how one

could develop the same degree of identity in a simulated situation without the use of films."[99]

Faculty Reactions

The subjective evaluation of the college faculty was most enthusiastic and positive.[100] Rich interaction between instructors and students, the use of a wide variety of instructional materials and techniques, and total involvement of all participants were instrumental in developing this kind of response.

A review of the experience of the past several years suggests two things concerning the elementary program. First, a broader application of various types of pupil products should be made. Second, more extensive use of the second grade film should be made. Except for the purpose of contrast, this film was not used very extensively. "There is tremendous value in helping students to recognize alternative styles of teaching and organization of classrooms and noting different responses due to children's ages."[101]

Student Evaluations

Student evaluations played an important role in evaluating and improving the nature of our offerings. While these evaluations did not generally lend themselves to highly sophisticated critical analysis, they did serve to give considerable feedback regarding the instruction.

Because the group of students involved was relatively small and because of the rapport that is quite easily developed in programs such as the acroclinical semester, much evaluation feedback to faculty came through rather informal procedures. Since students were not given grades for their work during this semester, they felt quite free to be candid. Recognizing that this was an experimental program and that many important changes had been made because of their contributions, students reacted in a helpful way. As one might anticipate, they were tremendously enthusiastic about this phase of the Insite program, as indicated by their verbal responses and their responses on an attitudinal questionnaire which was given.[102]

Recommendations

The Insite staff made the following recommendations:

> For those educators who are interested in developing a simulated program of their own, there are only two major suggestions. The first would relate to the matter of allowing for ample development activity prior to the actual use of the simulated materials. The correlation between careful planning-development and successful implementation is, of course, very high.[103]
>
> The second point relates to the fact that in the initial exploratory sessions, when plans are being made for the production and collection of materials, it is advisable to collect as much material as is possible within budget limitations. As was indicated previously, preparation of audio tapes and slides, and reproduction of materials is not a particularly expensive proposition. Ample materials of this type should be produced and appropriate reproductions made. In the long run, both time and money will be saved. The matter of filming is entirely different because quite obviously much greater expense is involved.[104]

Further Development

Simulation is now being used in other aspects of the elementary education program at Indiana University:

1. In the fall semester, 1967, the TEAM Project utilized the Griffith materials in a way similar to the Insite program.
2. Beginning with the spring semester, 1969, the Encore Project revised and extended this Insite simulation.
3. Beginning with the fall, 1969, the "Triple T" project began the use of the Griffith simulation.
4. As the result of the Insite simulation, Dr. Edward G. Buffie moved on to develop a new simulation package for commercial distribution. It was to have been tried in the experimental programs in spring, 1970.[105]

Both TEAM and ENCORE were operating with a level of resources that was only slightly above that of the regular program. All told, about half of its students will have simulated experiences in their professional training and education during the 1969-70 academic year. Undoubtedly, the simulated phase of various programs on the Bloomington campus will go through many changes as ways are constantly sought to refine the simulation process.[106]

CHAPTER III

"LOW-COST INSTRUCTIONAL SIMULATION" FOR TEACHER EDUCATION

Two sets of low-cost instructional simulation materials for use in teacher education programs have been developed at Oregon State System of Higher Education, Monmouth, Teaching Research Division. One of the sets of materials deals with problems of classroom management and the other deals with discovery teaching. The new "low-cost" simulation packages are to serve teacher education institutions that are faced with the problem of providing practical experiences for student teachers. They have been designed in an attempt to solve the growing problem of placing students in schools without interfering with the ongoing program of education for the classes or groups being observed.[1]

Originally based more on the operant conditioning model, the "low cost" simulation materials provide a different opportunity for the student than the materials used in Project Insite. A second difference appears to be in the fact that the "low cost" materials were designed to allow the supervisor to be in the situation with each individual student, pointing out important behaviors and features of instructional practices.[2] A third apparent difference is that the "low cost" materials were not necessarily designed as an integral part of a specific teacher training program.

For the purpose of gaining a better understanding of the rationale for the use of the "low cost" simulation, a brief history surrounding

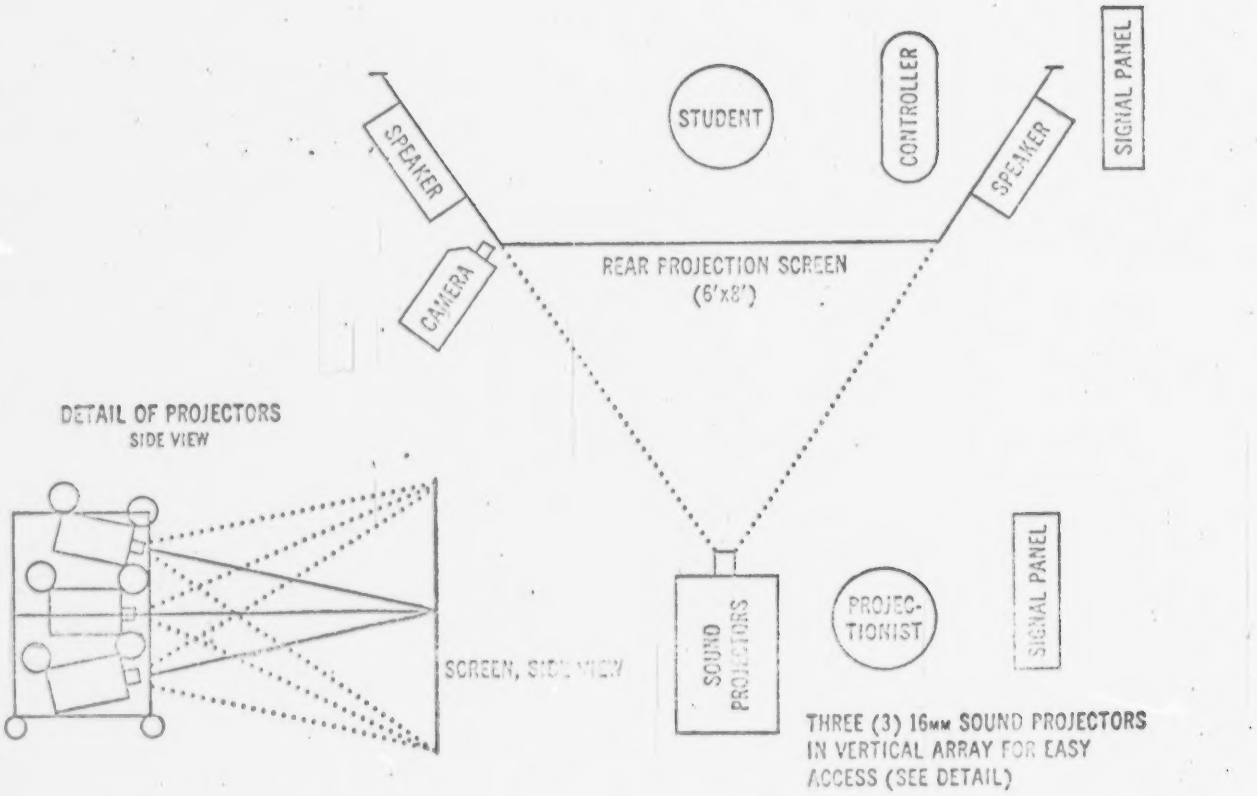

CHART 2 -- A Plan View of the Prototype Classroom Simulator Developed by Kersh.

this development of these materials is presented in the following section. This is followed by a description of the set of materials which deal with classroom management.

Brief History of Research and Development

The idea surrounding the development of these simulation materials has been based somewhat on the concept of the "Link Trainer."[3] In 1961, Dr. Bert Y. Kersh, funded under NDEA Title VII, built a simulation facility and initiated a variety of simulated classroom situations. The situations were simulated through the medium of sound motion pictures, and were called "Mr. Land's Sixth Grade." Essentially, a trainee undergoing the simulation experience was presented with problematic situations filmed so that the class appeared to be reacting directly to the student teacher, who was viewing the sequences. Several alternative feedback sequences were available for each problem that showed the trainee how the children might react to his handling of the situation. A large rear projection screen permitted life-like images to be projected for the trainee who responded to the scenes by physically advancing toward the screen.[4]

Chart 2 diagrams a plan view of the prototype Classroom Simulator which has been developed by Kersh and his associates.

As is illustrated in this diagram, the learner stands in a position relatively close to a large central projection screen and is observed by the supervising teacher through viewing ports in the smaller wing panels. The large screen allows a life-size visual image to be projected.

Appropriate stage props are used to further enhance the illusion of reality which was considered desirable at this point.[5]

The situations were presented by three 16 MM projectors controlled remotely from the supervisor's position behind the wing panel. The supervisor in control started and stoped the projectors and selected from among pre-filmed sequences as required.[6]

The essential aspects of the simulation techniques were (1) that a suitable (filmed) stimulus situation be presented to the learner, (2) that the physical practice situation be sufficiently "realistic" to give the learner the experience with some degree of psychological fidelity, and (3) that the student teacher be required to "act out" the response under supervision just as he would in a role-playing situation.[7] The feedback characteristics of the prototype apparatus added continuity and served to confirm immediately the adequacy of the student-teacher's behavior. Various schedules and formats of the feedback sequences were explored.

For research, classroom simulation was satisfactory; for training it was limited. The reasons are:

a. The materials required an elaborate simulation facility equipped with three or four modified projectors, a large rear-projection screen, and an electronic control system;

b. Only one student could be trained at a time;

c. An experienced teacher was required to act as the tutor-instructor-therapist;

d. The most students that could be handled in one laboratory was about 80 per term, assuming that two instructors were available morning, noon, and night;

e. A technician generally was required to be on call at all times to fix the hardware when it broke down;

f. The filmed materials were sequenced in such a way so as to make their use in extra-laboratory situations (e.g., the classroom) very difficult, if not impossible except for the most patient instructors.[8]

Conducting extensive and intensive research on the use of the classroom simulator, Kersh came up with some interesting conclusions which had significant implications for the consequent development of the "low cost" materials. This research[9] had two primary objectives as follows: (1) to develop the principles of skills required in the production of classroom simulation materials and the techniques for using the procedures in pre-service education of elementary school teachers, and (2) to conduct an experiment aimed at determining the need for "realism" (fidelity) in a simulation procedure used in teaching. Of these variables possibly contributing to fidelity in simulation, the size of and motion in the projected image were explored. The findings indicated the small projections resulted in higher post-test scores then life-size (realistic) displays. Results from experiments also indicated no significant differences in post-test scores between subjects who enacted and subjects who verbalized their responses. These results added further support to the suggestion that lower cost classroom simulation could be adapted to individualized or group based instruction where the projections are smaller than life-size and responses are described.

These limitations and research results led to the formulation of the Low-Cost Simulation Project, whose primary objective was to develop an assortment of low-cost instructional simulation materials for use in teacher education programs. The simulation materials were to be modeled after the "classroom simulation" materials developed originally by Kersh. A total of two sets of instructional materials were to be developed:

a. one dealing with problems of classroom management, and

b. one dealing with problems of teaching subject matter using the "discovery teaching technique".[10]

Classrooms at levels rangi[illegible] f[illegible]om Grade 4 through Grade 6 were to be simulated.

It was expected that through the use of the classroom simulation materials, students would be given an opportunity to develop responsiveness to cues and skill in applying general principles of instruction in the classroom. The materials to be developed were to be of such a nature as to permit their use in a variety of settings (e.g., individualized instruction, small group instruction, conventional instruction, and tutorial instruction (laboratory instruction similar to the prototype) in large as well as small teacher education institutions. Further, they were to be of a nature as to eliminate the need for expensive equipment and highly trained operation. The new materials also take account of the research concerning size of image, mode of feedback, mode of response, motion in image, and the effects of promptings that had been carried on at Teacher Research.[11]

The following section presents a description of the Classroom Management series, one of the two sets of "low cost" simulation instructional materials which were developed.

The Classroom Management Series

This section presents a detailed description of the set of "low cost" simulation materials entitled The Classroom Management series. This description is divided into two major areas. (1) Purpose of Training and (2) Mode of Training. The following section presents a brief description of the purposes of the "low cost" materials, including the content, the audience, and the objectives.

Purpose of Training

Content

The Classroom Management series teach and exercise the student in two widely applicable teaching principles. They are focused so that the teacher might control childrens' social behavior in a way which enables the teachers to devote their maximum effort and time to developing childrens' knowledges, skills, attitudes, and mental and physical health. In the context of these materials teaching principles are thought of as strategy rules used in the decision-making process. They describe the behavior a teacher should display if he wants to accomplish stated objectives with children who are exhibiting a particular behavior. The two teaching principles were chosen to be taught in the Classroom Management sense. They were felt to be crucial principles

that are reliable and believed to be important authorities in the field.[12] These principles are as follows:

> Principle I:
>
> If an activity is about to begin where standards of social behavior have either not been established or have not been previously followed, and the teacher desires to achieve specified management outcomes, then the teacher should use a social standard establishment strategy.[13]
>
> Principle II:
>
> If in an ongoing activity a child, or children, behave in a way which violates the management outcomes, and the teacher decides to attain the management outcomes, then the teacher should use a desist strategy which will attain the management outcome with the least possible disruption of the instructional objectives.[14]

The Audience

The Classroom Management series was designed specifically for college students entering for their first time a teacher preparation program. A typical population for whom the materials were prepared may be found at the Oregon College of Education, where a "junior block" program has been developed. In this program, junior-level college students participate in a number of laboratory experiences with children while receiving instruction in educational psychology and teaching methods. In this context, the Classroom Management series is supportive of the program, as well as supported or complemented by the program.[15]

The Objectives

Ideally, after training, the student would be expected to exhibit behaviors in the classroom that are consistent with the two principles taught. That is, if a new activity were about to begin and standards of social behavior had been established, the student (teacher) would be expected to establish social standards in an acceptable way.[16] Also, if a situation arises where children do not follow management objectives, then, the student (teacher) would be expected to use an appropriate desist strategy -- one that would attain the management objectives with the least possible description of the instructional objectives. Since adequate (and practical) tests to assess classroom performance related to the two principles taught are not available, the stated objectives of the Classroom Management series might better be stated as follows:

Given a number of novel, filmed episodes that represent problematic classroom situations, the student will use a desist strategy that attains stated management objectives with the least possible disruption of the instructional objectives.

Given a verbal statement about a classroom situation that involves a new activity, or one where social standards have not been previously established, and given an accompanying film of the class, the student will use a social standard establishment strategy. He will be permitted to ask other students to role-play the parts of children in the class.[17]

Modes of Training

The instructional system is divided into two parts or phases. Phase I introduces students to the training, and teaches the two principles of classroom management to them. Phase II exercises the student in the application of these principles, and provides an opportunity for the student to evaluate his learning. The following sections describe these phases separately.

Phase I

The Phase I instructional program uses an integrated set of materials, including a student manual and a film-tape presentation. The film-tape presents a series of classroom episodes to illustrate the principles and concepts being taught.

The instructional program for Phase I contains five parts, as listed below.

> Part 1. The three major roles of the classroom teacher are presented; instructor, classroom manager, and therapist.
>
> Part 2. Techniques of preparing children for a new activity or for an activity where their social behavior has not been previously satisfactory are presented.
>
> Part 3 and 4. Various teacher strategies for dealing with disruptions in the instructional program are given.
>
> Part 5. Review.[18]

Generally, three modes may be used in Phase I training. The conventional classroom instructional mode, self-instruction and the

small group instructional mode. These three modes are briefly described below.

Conventional Classroom Instruction: In this case, the instructor makes use of a carousel slide projector, tape recorder and program synchronizer to present the classroom situations. Each student is provided with a manual in which he may take notes and write his responses to exercises. Class discussion is used to answer questions about an episode or an exercise.[19]

Self-Instruction: Here, a student is provided with a projection system that synchronizes the slides and tapes. Typically, a study carrel or other private area is used. If noise is a factor, earphones may be used. The manual is written so that the student is guided from slide-tape to manual and back again without any outside assistance. When the self-instructional mode is used, it is recommended that opportunity be given regularily for small group discussion. An alternate to this plan would be to provide a tutor that would always be available to answer questions and help students straighten out any difficulties. A schedule could be arranged to have several students studying in a room at one time, always within reach of support and guidance from an assistant or tutor in or near the room.[20]

Small-Group Instruction: In this mode, three to five students could work together with the slide-tape projection system. An advantage to this system is that students have an opportunity to discuss between themselves pertinent points raised by the program. A disadvantage is that it, like the conventional classroom mode, paces

every student with the group, not individually.[21]

Phase II

The Phase II instructional program uses motion pictures integrated with an orientation booklet and student manual. The motion pictures are used to present the simulation episodes filmed from the point of view of the student to which he can react. Both programs are supplemented by class of small group discussion or student-instructor (tutor) discussion either during or after the formal training session.

The instructional program for Phase II consists of three parts:

> Orientation -- Students have an opportunity to "meet" the children in the simulated class. Also, students learn about the school and the community.
>
> Training -- The student encounters simulated problematic situations in the series (called "days") of twelve problems each.
>
> Evaluation -- A third "day" of simulated situation is reserved for the student to assess himself.[22]

Again three modes of instruction may be used in Phase II training. These are classed as 1) Mode A: Individualized Laboratory (Tutorial Instruction), 2) Mode B: Conventional Classroom Instruction (Large or Small Group); and 3) Mode C: Self Instruction

These three Modes are briefly summarized below.

Mode A: Individualized Laboratory (Tutorial) Instruction. The individualized laboratory instruction mode is identical to that employed in the original "Kersh Simulator," a special laboratory facility (See Figure 1). In brief, the instructional procedure which has been developed for instruction with the tutorial mode is as follows.

First, the student teacher (T) is oriented to the simulation facility and to the procedures.[23] Then, T is given the instruction in the simulation facility with the projections adjusted to the particular degree of realism desired. The filmed problem sequences of actual classroom situations are presented and T is requested to enact his response to each. Depending upon the reaction of T, the instructor (I) selects and projects one of two or three alternative feedback sequences. In the Individualized laboratory instructional mode, the student teacher is "steered" into increasingly more effective response modes by the laboratory instructor who observes, evaluates, and communicates through the selection of "feedback sequences" and through his indirect guidance and discussion. It is believed that this mode is ideally suited to students who may be having some difficulty in the teacher education program, or feel some need for this highly individualized (and intensive) training. Some have remarked that this training is "half-instruction, half-therapy."[24]

After the instructional phase, T's performance is tested in the simulation facility. Twelve new filmed problem sequences, different from the instructional sequence, constitute a test of transfer. Briefly, T stands in a position relatively close to a large central projection screen and is observed by the instructor from the side. The large screen allows a life-size visual image to be projected. Appropriate state props are used to further enhance the illusion of reality. The instructor controls three motion picture projectors remotely, starting and stopping the projectors and switching from one or another

as required. An automatic control system keeps the problem of feedback sequences in the proper arrangement.[25]

Mode B: Conventional Classroom Instruction. The classroom simulation materials are also adapted for use in conventional classroom settings. Use of the materials with groups usually preludes the extensive use of student feedback sequences as used in the individualized laboratory mode. However, by eliminating the feedback sequences and substituting demonstrations by a master teacher, so that students may compare their responses with a model, the instructional materials may be used to good advantage in grouped instructional settings.[26] The recommended procedure is as follows. As in the other instructional modes, a problem sequence on film is first shown, but this time to the entire class, using a conventional motion picture projector and screen. The projector is stopped and students are asked to decide what their response would be, (writing down their responses if necessary). Next, the classroom instructor conducts a discussion designed to reveal alternative modes of responding to the problem and the explanation for the different responses which the student teachers volunteer. After the classroom instructor is satisfied that the major response alternatives have been revealed and analyzed, he may then start the motion picture projector again and project the model teacher demonstrating his (or her) technique for handling the particular problem and the pupil consequence. Also, the classroom instructor may communicate to the class the "textbook" explanation for the master teacher's behavior. By using the master teacher on film as the standard,

the classroom teacher is able to remain neutral if he wishes. The classroom instructor may also choose to disagree with the "textbook" standard and analysis and, in so doing, communicate the important fact that there are no hard and fast rules in teaching.[27]

After the discussion and comparison with the standard master teacher films, the classroom instructor may repeat the process using another problem on film. Depending on the length of the discussion, three to five problem sequences may generally be covered in one class hour. This is a slow process at best and may have a palling effect if continued for prolonged periods of time. It was generally more effective to utilize only selected problems from the total set of classroom simulation materials and to devote only a portion of the instructional period to them. The systematic use of the simulation materials in the classroom setting was possible and is perhaps the least expensive way of using the materials. "However, it makes it difficult to employ the available materials to full advantage."[28]

An alternate to this technique would involve splitting the class into several groups of four to six students each. One of each team might role-play a response in front of the others while the film is shown, and then discuss the reasons for the particular response. At this point, teams might be called on to report, followed by a general class discussion and the showing of the model teacher response and pupil consequence. A team of instructors and assistance should be available to the teams for help and consultation.[29]

Mode C: Self-Instruction. When this mode is used, the student works alone in a study carrel situation with the motion pictures and manual. A typical sequence is as follows:

STEP	MATERIAL	STUDENT ACTION
1.	Student Manual	Study the background, the situation, i.e., the time of day, the activity, and other pertinent information.
2.	Classroom Simulation Film	View the situation. Respond when appropriate.
3.	Student Manual	Complete Exercise 1 (what was your response, etc.?).
4.	Classroom Simulation Film	View the probable class response.
5.	Student Manual	Compare your response with the teachers' response. How did it differ? Complete Exercise 2.

Conclusion:

In order to allow the reader to gain a greater perspective of the Classroom Management Series the pages included in Figures 16 through 19 present sample parts of the Student Manual. These include 1) the Table of Contents, 2) the Introduction and 3) the first exercise in each of Parts 1 and 4 of the Series.

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Fig. 16--The Table of Contents taken from the Student Manual for the Classroom Management Series.

INTRODUCTION

An elementary teacher plays three major roles. He is an instructor. He is a therapist. He is a group manager.

In his role as instructor the teacher develops the pupil's knowledge, attitudes, and skills in language, mathematics, social studies, science, music, art, and physical education.

In his role as therapist the teacher is concerned with developing emotionally well-adjusted individuals.

In his role as group manager the teacher is concerned with organizing the children's social behavior in a way which enables him to do a more effective job of instruction and therapy.

As teachers customarily play their roles of instructor and therapist in group situations, they must first be skilled at organizing groups to be effective in those roles. If the teacher must spend seventy-five percent of his time managing a class, he can devote only twenty-five percent of his time to instruction and therapy. Conversely, the teacher who can devote twenty-five percent of his effort to managing can expend the remaining seventy-five percent of his effort to instruction and therapy.

The goal of the Classroom Management Instructional Simulation Materials is to help you become a better classroom manager and thus, we hope, a more effective teacher. These materials are designed to acquaint you, and give you practice with two principles of classroom management. There are however many principles of classroom management. We have selected the two we feel will be most useful to a new teacher. These two principles are:

1) the setting of behavior standards for the classroom and
2) the privacy and forcefulness of the communication between the teacher and his students.

It is our immediate objective to provide you with an introduction to these principles and then give you an opportunity to apply them.

The specific examples in the slide-tape presentation of teacher behavior should be thought of as "benchmarks." A benchmark, in surveying terms, refers to a reference point from which further measurements may be taken. The specific classroom techniques shown should be considered in that light. They are not the only way to handle the situation. In fact, in most situations you would handle it differently. Yet, both techniques, the ones we show and your own, will illustrate the principle. Remember a geological benchmark is not necessarily gold-plated. Its usefulness lies in the fact that other points may be established from it. The usefulness of the teaching examples and techniques we show lies in the fact that they may be used as examples for comparison. They furnish you with a starting point, a foundation upon which you can develop and build your own individual teaching skills.

In the next few weeks you will be involved in two phases of instruction with the Classroom Management Materials. Phase I will acquaint you with two principles of classroom management. Phase II will give you the opportunity to apply these two principles in simulated classroom situations.

Fig. 17--Information presented to the student in the Introduction to the Student Manual.

Phase I.	Phase II.
The student is oriented to the two principles of classroom management.	The student is given the chance to practice the two principles of classroom management that he was oriented with in Phase I.

The instructional program for Phase I contains five parts.

-Part 1. The three major roles of the classroom teacher are presented: instructor, classroom manager, and therapist.

-Part 2. The presentation of the techniques of preparing children for a new activity or for an activity where their social behavior has not been previously satisfactory.

-Part 3 and 4. Various teacher strategies for dealing with disruptions in the instructional program.

-Part 5. Review.

You, as a student, should be aware of some of the advantages and disadvantages of using simulation in instruction. It has sometimes been necessary:

- to stage presentations
- to use less than optimum classroom equipment arrangement for filming purposes
- to include teacher strategies used to implement the principles that are not always the most desirable
- to have the situation exaggerated in order to show clearly the desired principle and its implication

In some places instruction may seem less than adequate. The problems arising from these situations may not have occurred if the instruction had been presented in a different manner.

Instructional Procedures

The Phase I instructional program uses an integrated set of materials, including:

(1) MANUAL

(2) FILM-TAPE PRESENTATION

Fig. 17 continued

- Follow the manual carefully. It is written to guide you along each step. The materials are written to be used in sequence.

- The introduction is usually divided into two parts - 1) background information and 2) objectives of the episode and exercises.

- After becoming familiar with the classroom background and the instructional objectives, watch the film-tape presentation.

- The written exercises are designed to give you the opportunity to apply the principle set forth in the instructional objectives.

- Some comments have been prepared to help you evaluate your work.

In review: 1) read the introduction
2) watch and listen to the film-tape
3) complete the exercises
4) evaluate your responses

These materials are designed to be used in an "audio-tutorial" fashion. An audio-tutorial situation has each student working alone, but with immediate assistance available from a tutor or the instructor to answer questions or straighten out any difficulties. If a tutor or the instructor is not available, students may find it helpful to question each other. This could be done with a small group of students working around one Audiscan machine, but each working in his own manual. Our research has shown the "audio-tutorial" system to be the most effective way of working with Phase I.

Fig. 17 continued

PART I

The Three Major Roles

Introduction

The film-tape sequences which follow show two classroom episodes. In each episode the teacher has the same children and the same instructional objectives. The major difference between the episodes is the teacher's use of classroom management procedures. In each episode the teacher's effectiveness in classroom management is directly related to his effectiveness in instruction and therapy. When a teacher uses the more effective classroom management procedures he has the opportunity to do a more effective job of instruction and therapy. As you watch each episode: (1) determine what teacher behavior characterized the role of instructor, therapist, and classroom manager, and (2) determine which episode has the least management time and the most instruction and therapy time.

The objectives of Part One, stated in terms of what you will be able to do after instruction are:

> Identify from a series of examples the three roles an elementary teacher plays: instructor, therapist, and group manager.
>
> Identify which episode has the least management time and the most instruction and therapy time.

NOW WATCH THE FILM-TAPE PRESENTATION MARKED "PHASE I. CLASSROOM MANAGEMENT, PART I.

Exercise 1.

In which of the two episodes was Mr. Warren a more effective therapist and instructor. Indicate your answer with a check.

Episode A____

Episode B____

In a short paragraph, state why. If you need more room, write on the back of the page.

COMPARE YOUR WORK WITH THE COMMENTS ON THE FOLLOWING PAGE.

Fig. 18--The introduction and first exercise for Part I in the Student Manual.

COMMENTS - EXERCISE I

Episode A.

Mr. Warren had more time in Episode A to be an effective instructor and therapist. He was able to give Doug a feeling of success by helping him with the number line. He did not have to punish the class for misbehaving. In Episode B, Mr. Warren was less effective as a classroom manager. He spent more time managing in Episode B than he did in Episode A.

NOW CONTINUE WITH EXERCISE 2 BELOW:

Fig. 18 continued

PART 3

Dealing with Disruptions

Introduction

A teacher continually faces the problem of coping with disturbances which arise in the classroom. In the situations in Part 3 you will observe one teacher making two different responses to the same disturbance. You will be asked to identify the more effective teacher response to each disturbance. The most effective teacher response will achieve the management objective with less disruption to the instructional program.

The objective of Part Three, stated in terms of what you will be able to do after instruction, is:

> Identify from a series of paired episodes the most effective teaching strategy for achieving desired management objectives with less disruption to the instructional program.

In all episodes in Part Three, norms for behavior have been previously set.

NOW WATCH THE FILM-TAPE PRESENTATION MARKED "PHASE I. CLASSROOM MANAGEMENT, PART 3."

Question 1

What teacher response did Mr. Warren use in Episode A?

Question 2

What teacher response was used in Episode B?

GO TO EXERCISE 1, ON THE FOLLOWING PAGE.

Fig. 19--The introduction and first exercise for Part 3 in the Student Manual.

ANSWERS - QUESTIONS 1 AND 2

1. Mr. Warren without a word stands beside the two boys to suggest they get back to work.

2. Mr. Warren, standing beside the two boys, vocally tells them to go back to work.

ANSWERS - EXERCISE 1

1. How much did the teacher's response disrupt the instructional program?

   Episode A None Episode B Little

2. Were the management objectives accomplished?

   Episode A Yes Episode B Yes

3. Which teacher response accomplished the management objectives with the lesser disruption of the instructional program?

   Episode A

The teacher response Mr. Warren used in Episode A was more effective because it accomplished the management objectives with the lesser disruption of the instructional program. In Episode B three children stopped what they were doing and looked up.

NOW CONTINUE WITH SITUATION 2 ON THE FILM-TAPE PRESENTATION.

Fig. 19 continued

Exercise 1.

How much did the teacher's response disrupt the instructional program? (Write none, little, or much in each blank.)

Episode A_____ Episode B_____

Were the management objectives accomplished? (Write yes or no in each blank.)

Episode A_____ Episode B_____

Which teacher response accomplished the management objectives with the lesser disruption of the instructional program? (Write A or B)

Episode_____

COMPARE YOUR COMMENTS WITH THOSE GIVEN ON THE FOLLOWING PAGE.

Fig. 19 continued

CHAPTER IV

INNER-CITY SIMULATION LABORATORY

The Inner-City Simulation Laboratory (ICSL) is the second simulation program for teacher preparation developed by Cruickshank in corporation with Science Research Associates (SRA).[1] The first simulation program was the Teaching Problems Laboratory (TPL) which had been published in 1967. In the overview of ICSL Cruickshank describes the ICSL program as follows:

> An inner-city elementary school is re-created wherein participants assume the role of Pat Taylor, a sixth-grade teacher, and practice solving classroom problems. These problems were identified by 287 teachers of fourteen inner-city schools located in twelve American cities. Each problem is presented either on film, through role plays, as a playlet, as a written incident, or as some combination. Prior to the presentation of classroom problems, participants are oriented to the community and school in which they will work. In addition, they receive a faculty handbook, cumulative record folders, sociometric data, case studies, and miscellaneous reports[2] for a class of sixth-graders.

The present chapter describes the ICSL in some detail. The sections include 1) the rationale for developing the ICSL; 2) uses for the ICSL; 3) the components of the ICSL; 4) the incidents and methods of presentation; 5) building the simulation laboratory: the research; 6) possible schedules for using the ICSL; and 7) conducting the laboratory.

The Rationale for Developing the ICSL

According to Cruickshank, the inner city is the most difficult kind of teaching".[3] On the other hand, he found that most universities are doing nothing about preparing teachers for the cities, and many have no intentions of correcting this situation in the future.[4] He hoped that ICSL would provide a "safe" setting wherein both the professional college and its students can explore the phenomenon they understand so little. This exploration may possibly produce teams of teachers along with professors who will be ready for the realities of life that have too long been avoided.[5]

In summarizing this rationale for developing the ICSL, Cruickshank states

> "The simulation experience is designed basically to help reduce the "reality shock" experienced by teachers who wish to work with the disadvantaged, but are poorly equiped to do so.[6]

The following section briefly outlines the uses for ICSL proposed by Cruickshank.

Uses for the ICSL

Cruickshank proposes two uses for ICSL. In describing the first of these, he states

> THE INNER-CITY SIMULATION LABORATORY, like the TEACHING PROBLEMS LABORATORY, is designed to provide opportunities for pre- and in-service teachers to accomplish two goals that are not readily attained through normal modes of academic inquiry. First, the ICSL attempts to create a lifelike model of a ghetto school

> and neighborhood so that the learner can study the setting and attempt to understand it. The learner can operate like the anthropologist and observe the phenomenon of culture--in this case both the neighborhood's and the school's.[7]

Thus it is felt that the ICSL permits the learner to inquire as a social scientist into the educational scene and reflect upon its problems. Such investigation allows for the use of a general framework of questions, such as the following, in order to analyze the inner-city school environment:

1. What groups are involved in the inner-city school setting?
2. What cultural factors in the school or outside it are most pertinent?
3. What cultural values bear significantly on the problem?
4. What channels of communication are open and at what points are there blocks or breakdowns?[8]

A second advantage (or use) of the ICSL is that it provides a classroom, albeit simulated, "wherein the learner can assume the role of the teacher and work toward solutions of the most frequent, most severe problems reported by samples of teachers from different settings."[9] In the case of the ICSL the exposure and analysis of critical problems reported by teachers would "prove to be an advantage in avoiding some damaging effects of cultural shock."[10]

Thus the ICSL can be used as a carefully controlled laboratory experience as well as a vehicle to provide anthropological and sociological insights.

The Components of the ICSL

The materials for the INNER-CITY SIMULATION LABORATORY are separated into two units--the Director's Unit and the Participant's Unit. These are described below.

The Director's Unit

The Director's Unit contains all the materials needed to conduct the simulation. Included in this unit are two filmstrips with accompanying record, fourteen sound-and-color films, a set of role-play cards, a book of spirit masters, the Simulation Director's Guide, and a complete Participant's Unit.

The Two Filmstrips and the Long-Playing Record

In the first filmstrip, Orientation to Edison School, the principal, Harvey Utter, greets Pat Taylor, the participant, who has come to the school a few days before classes begin. Mr. Utter briefly describes the community of Gardner Park, its agencies, and its problems. He then describes Edison School and its students, faculty, and programs, and gives the participant some orientation material.

The second filmstrip, Orientation to the Urban Public Schools, recreates a citywide meeting held for new staff members. Three speakers address the Pat Taylors during this presentation: Mr. Martin of the Bureau of Teacher Personnel; Dr. Gurney, assistant to the superintendent; and Mr. Corey, president of the Urban Teachers Union.

Movies

Each of the fourteen sound-and-color movies presents one thirty-four critical incidents. The showing times of these films range from 1 1/2 to 4 1/2 minutes, with the average being 3 minutes. In each movie the participant, Pat Taylor, observes incident through the lens of the camera. Pat's words are not but appear as subtitles in the movies.[11]

Role Play Cards

Role plays have been developed to be used in several of cidents.

Book of Spirit Masters

This component consists of 58 spirit masters to be used of the thirty-four incidents and both orientation sessions. of spirit masters in this book are (1) audio scripts of the orientation sessions and each of the fourteen movies; (2) and data for all the non-filmed incidents, such as memos, homework assignments, and playlet scripts; (3) an Alternate Response Form; and (4) the Interaction Inventory.

Simulation Director's Guide

This provides information for the simulation director. suggests that this Director's Guide should be studied careful a simulation is conducted.[12]

The Participants' Unit

The professional materials normally available to teachers are replicated in the Participant's Unit, which consists of the DATA BOOK and a set of cumulative record folders.

Data Book

Much of the resource material necessary to establish the context of the simulation is contained in the DATA BOOK. Section 1 consists of orientation materials--the FACULTY HANDBOOK, community information, and so forth. Section 2, the Response Guidelines, suggests considerations and activities for the participant as he engages in resolving the problem situations. Section 3, lists bibliographical references relating to each incident. Section 4 consists of sociometric data for the class, and Section 5 contains supplemental data--psychological reports, letters, discipline records and so forth--for most of the children in Pat Taylor's sixth grade class.

Cumulative Record Folders

A cumulative record folder is provided for each child. The information is real except that names, dates, and other identifying data have been changed to ensure the anonymity of the actual children and school.

The Incidents and Methods of Presentation

The critical incidents in the ICSL are presented to the participant through the use of movies, playlets, written items and written role play. On the chart presented in Figure 20 is provided a list of the incidents in chronological order, with an identifying title, the statement of the problem as reported by inner-city teachers, and the method of presentation used in the simulation.

Summary

From the information presented in the previous sections one can get a general understanding of the formate of the ICSL. In the following section is presented the analysis of the reference system which was conducted in order to build this simulation program.

Building the Simulation Laboratory
The Research

In constructing the INNER-CITY SIMULATION LABORATORY two basic tasks were determined. The first task was to identify the day-to-day problems of inner-city teachers. The second task was to create a lifelike setting in which these problems could unfold.[13] These tasks are summarized in the following sections.

Determining the Problems for the Critical Incidents

Since the problems occur in inner-city schools, the sixteen cities in the United States with the largest school systems were identified. A letter was addressed to each superintendent of schools requesting

Incident	Title (Statement of Problem)	Method of Presentation
1	Phyllis Smith Asleep in Class *(Child coming to school without proper food or sleep)*	Movie
2	Sidney Sams Strikes Out *(Helping a child with social adjustment problems)*	Movie
3	Marsha Wright Has an Excuse *(Child refusing or otherwise finding ways to get out of classwork)*	Movie
4	Hayward Clark's Fear of His Father *(Helping a child upset by some home condition)*	Written
5	Wesley Briggs and the Class's Library Behavior *(Dealing with a child who rebels or deliberately tries to upset the teacher)*	Movie
6	Phyllis Smith's Hearing Problem *(Getting parents to take an interest in their child's health)*	Playlet
7	Wesley Briggs Breaks Bradley Livezey's Watch *(Dealing with children who are destructive of others' property)*	Movie
8	Barry Parsons' and Mark Connors' Report Cards *(Dealing with children who do not care if they receive poor grades)*	Movie
9	Conferences with Mrs. Parsons and Mrs. Connors *(Dealing with parents not interested in children's schoolwork)*	Role plays
10	Stanley Jones Tests the Rules *(Dealing with children who want attention and will do anything to get it)*	Movie
11	Classroom Interruptions *(Dealing with classroom interruptions)*	Movie
12	Bo Green's Mistreatment at Home *(Knowing what to do with children who are mistreated at home)*	Playlet Role play
13	Q-Sort of Discipline Methods *(Finding satisfactory methods of disciplining children)*	Written
14	Mrs. Waters' Class Doubles Up *(Handling excessively large classes)*	Movie
15	Mort Coleman, Accept or Reject *(Helping emotionally disturbed children)*	Playlet
16	Marsha Wright's Mother's Friend *(Dealing with children not motivated to work)*	Written
17	Panel Report *(Finding time and ways to individualize instruction)*	Written

Fig. 20--A listing of the critical incidents included in the Inner-City Simulation Laboratory.

18	Wesley Briggs Arrives Early *(Handling children who won't obey teacher directions or orders)*	Movie
19	The Girls Club *(Children associating with other children who are a poor influence)*	Written Role play
20	Ronald Thurgood and Stanley Jones Relate Parent Opinions *(Dealing with parents who won't respond to report cards or requests for conferences)*	Movie
21	Craig Powers, Recess Roughneck *(Child hurting another for no obvious reason)*	Movie
22	Sharon Stone Calls Debbie Walker a Thief *(Helping children account for their school supplies and personal belongings)*	Movie
23	Ability and Achievement Testing Techniques *(Helping children realize their capabilities and limitations)*	Playlet
24	Ellen Abrams' Nervousness *(Helping children who are extremely nervous)*	Written
25	Wesley Briggs Matches Ronald Thurgood *(Dealing with children who feel that stealing, gambling, etc., are acceptable)*	Written
26	The School Census *(Helping children who won't listen to, remember, or follow directions)*	Written Role play
27	Sidney Sams Leaves the Room *(Students misbehaving when left unsupervised for short periods)*	Movie
28	Bo Green Defends His Dialect *(Helping children who have limited vocabulary and speech)*	Written
29	Phyllis Smith's Absenteeism *(Getting parents to cooperate on children's attendance)*	Written
30	Mary Christian and Emma Morgan Discuss Assignments *(Helping students to work independently)*	Written
31	Wesley Briggs's Mother Asks for Help *(Helping parents who cannot control their children at home)*	Written Role play
32	Phyllis Smith Smells *(Getting children to take an interest in their personal appearance and cleanliness)*	Written
33	Sidney Sams, Daydreamer *(Helping a child who daydreams much of the time)*	Written
34	Committee Assignment *(Teaching children unprepared for grade-level work)*	Written

Fig. 20 continued

cooperation by (1) identifying an elementary school in which many educationally disadvantaged children were located and (2) asking the principal of that school to select two teachers at each grade level who, in turn, would provide information on an instrument called "My Biggest Problem Today Inventory", or MBPTI. Twelve of the sixteen school systems responded affirmatively and fourteen elementary schools were designated by superintendents to participate in randomly selecting teachers who would respond on the MBPTI.[14]

Teacher respondents were asked to describe in detail "the school incident that caused them the greatest concern each day for ten consecutive days." One hundred forty teachers submitted 1400 critical incidents. It was found that the 1400 reported problems could be reduced to 184 general statements.[15]

This initial analysis and synthesis of the MBPTI data permitted the construction of a 184-item self-report inventory called the "Teaching Problem Inventory" or the TPI. The respondents to the TPI were required to consider each of the 184 problem statements and report (1) its frequency of occurren and (2) its severity. Two hundred and eighty-seven (287) teachers responded on the TPI.[16]

Statistical analysis of the data was made in order to determine which of the 184 items were significantly (.01 level of confidence) different from the overall trend of problems reported on each scale or on both scales. Of the 184 items, 96 were significant on either the frequency or the severity scale.[17]

Each of the 96 problems listed can be assumed to be a problem of teachers in the inner city. To reduce the number of problems further, a second analysis was applied resulting in a list of 45 problems. In turn, the list of 45 problems was further reduced to 37 by combining similar problems. The latter list of problems provided the nucleus for construction of the critical teaching incidents to be constructed. Thirty-four of the 37 eligible problems were re-created.[18]

Through these procedures it became possible to develop problem incidents that were representative of those problems described by inner-city teachers.[19]

Creating a Life-Like Setting

The second task was to construct a hypothetical inner-city setting in which the problems could occur.[20] Cruickshank describes this procedure as follows.

> A large city school district agreed to provide data normally used to orient a teacher. The data were assimilated and organized for presentation in the form of a narrated filmstrip intended to orient each participant, or Pat Taylor, to his or her new teaching job in the simulated city of Urban. In addition the cooperating city school system named two inner-city elementary schools to serve "passive" and "active" roles. The passive school became the prototype to be simulated. It provided the author with, among other things, a set of cumulative record cards for a fifth-grade, school rules and regulations, case studies, and sociometric data. The materials were meticulously studied and copied in order to produce the pupil data to be used by Pat Taylor. Visits to the school and concomitant discussions with staff provided additional information upon which to draw. Soon the passive-school metamorphosis was complete and the fictitious Thomas Edison Elementary School emerged.[21]

The "active school" mentioned above was used to provide a stage for filming the problems. A classroom of children in the active school played the roles of the real children in the passive school.[22]

Summary

The above description provides an account of some of the work that had to be performed in order to produce a simulation base on a model of "reality". The following section describes some possible schedules for using the ICSL.

Possible Schedules for Using ICSL

The Inner-City Simulation Laboratory was developed to be used in either preservice teacher preparation or as part of in-service programs.

In-Service Uses

Cruickshank states that in the context of in-service use the ICSL can be employed as, 1) a summer or September experience for teachers new to the city school districts; 2)a complete year-long in-service program; or 3) a selected part of a broad in-service program that deals with the teaching of the disadvantaged.[23]

Cruickshank describes further in-service uses.

> In addition, school systems can use the materials as part of their procedures for screening applicants for teaching positions much as situational tests are employed in the armed forces and in industry. The traditional screening procedures, including the interview, usually do not reveal how a teacher-to-be will behave in the classroom.

> Other possible uses of the laboratory include utilization with Future Teachers of America groups and in occupational counseling. The ICSL, like the Teaching Problems Laboratory, can also be used with Parent-Teacher Associations or other community groups to present a slice of teaching life. It can also reacquaint administrators with the realities of the classroom.
>
> A most recent use suggested to the author is to permit students in inner-city classrooms to observe the incidents, describe from their point of view their feelings, and then suggest what the school and the students can do to reduce or eliminate such problems.[24]

Pre-Service Uses

Cruickshank suggests that in colleges and universities preparing teachers, the ICSL can be used as a one- or two-week workshop program focusing on the teaching of the disadvantaged. Among other uses at the college level are the following:

1. As a quarter or semester course (actually to complete the entire ICSL program adequately, two quarters are recommended).
2. As a complement to courses in sequence including educational psychology, sociology of education, or child development.
3. As an introduction to student teaching or participation.
4. To substitute for part of student teaching.
5. To provide vicarious experience with problems of teaching the disadvantaged where an inner-city experience is unavailable.
6. As an orientation to teaching or as part of the Introduction to Education course.
7. As a screening device in selecting candidates to enter colleges or programs preparing teachers.
8. As a special seminar for seniors who have taken positions in city school districts.[25]

An example of one possible laboratory schedule is presented on this chart in Figure 21.

Conducting the Laboratory

In conducting the simulation lab, Cruickshank suggests that the participants work in groups. The size of the group should be from three to six members. He urges that the group sizes should be limited so that full interaction can take place.

In describing the beginning sessions focused on orienting the students to the ICSL he suggests the following:

> Participants should be clear about the rules for the simulation. After each problem is presented, a period of time (determined by the director in terms of his objectives and the schedule) is devoted to independent problem solving using the Response Guidelines in Section 2 of the Data Book or the Alternate Incident Response Form in the book of spirit masters. Next the participants are to discuss the problem in their small group. Each participant is responsible for projecting alternatives while his colleagues project possible consequences to this teacher behavior. The discussion continues as the total group interacts.
>
> Begin the simulation itself by informing participants that from this point on each one is Pat Taylor, a new sixth-grade teacher at Edison School in the heart of the city of Urban. Remind them that they will see the incidents through the eyes of the camera--that, in fact, the camera is Pat Taylor. When Pat speaks, titles appear on the screen. Should a participant react to a filmed incident by stating "I wouldn't say that" or "I wouldn't do that," assure him that at that time that <u>is</u> what he did and said.. Challenge him, however, by asking what he would do and say next time.[26]

Day 1/am	General orientation and examination of the materials ORIENTATION TO EDISON SCHOOL (Filmstrip 1 and side 1 of LP record) *questions and discussion* CUMULATIVE RECORD FOLDERS (32) DATA BOOK (Section 1: Community statistics, letters to new teachers, and the Edison Faculty Handbook) *analysis and discussion*	
	pm ORIENTATION TO THE URBAN PUBLIC SCHOOLS (Filmstrip 2 and side 2 of LP record) *questions and discussion* INCIDENT 1 (Film 1) presentation and discussion Homework: *Assign construction of sociogram for Incident 2*	
Day 2/am	INCIDENT 2 INCIDENT 3	pm INCIDENT 4 INCIDENT 5
Day 3/am	INCIDENT 6 INCIDENT 7	pm INCIDENT 8 INCIDENT 9 Homework: *Incident 13 (spirit master)*
Day 4/am	INCIDENT 10 INCIDENT 11	pm INCIDENT 12 INCIDENT 13 Homework: *Incident 17 (spirit master)*
Day 5/am	INCIDENT 14 INCIDENT 15 INCIDENT 16	pm INCIDENT 17 INCIDENT 18
Day 6/am	INCIDENT 19 INCIDENT 20	pm INCIDENT 21 INCIDENT 22
Day 7/am	INCIDENT 23 INCIDENT 24 INCIDENT 25	pm INCIDENT 26 INCIDENT 27
Day 8/am	INCIDENT 28 INCIDENT 29	pm INCIDENT 30 INCIDENT 31
Day 9/am	INCIDENT 32 INCIDENT 33 INCIDENT 34	pm *Independent study synthesis of past nine days in preparation for answering central questions*
Day 10	ALL-DAY SEMINAR TO DISCUSS CENTRAL QUESTIONS AND TO DETERMINE NEXT STEPS FOR CONTINUED PROFESSIONAL GROWTH.	

Fig. 21--A suggested schedule for a two-week laboratory experience using the ICSL. Source - Cruickshank, on cit, p. 14.

The first episode in the simulation is presented in Filmstrip 1, Orientation to Edison School, as Pat Taylor visits the school prior to its opening and meets with Mr. Utter, the principal. After this participants given opportunity to study the Community Fact Sheet, Advice to New Teachers, and the Faculty Handbook, and cumulative record cards all found in the Data Book, Section 1. Cumulative record cards can be studied as well.

In the Director's Guide are many questions that the simulation director can ask to provoke discussion and analysis of the orientation to the school. An example of some of these questions are

1. How do you believe ghettos like Gardner Park are formed?
2. How do ghetto areas compare with middle-income neighborhoods in terms of population, racial or national origin, employment, crime, health, or other?
3. What agencies serve ghetto areas? What services are available? How effectively are the sources given or sought?
4. What are some special or compensatory programs being instituted that attempt to overcome effects of early deprivation and weak achievement motivation?

Filmstrip 2, Orientation to the Urban Public Schools, is to be presented next. In it Pat attends a citywide meeting of new teachers. Again questions are available for use in reacting to and analyzing the filmstrip.

In describing the Faculty Handbook, used in the above-mentioned activities, Cruickshank explains

> The Faculty Handbook for the Edison School is not unlike those being used today in many elementary and secondary schools....

> Handbooks of this kind reveal a great deal about the character of a school and school system. Since handbooks are often prescriptive, the content usually denotes attitudes and values as well as the ways of working. One can learn a good deal about a school by attending to and analyzing handbook statements. In the process one can, in fact, find much about oneself.[27]

A number of questions are provided to guide in the analysis and discussion of the Edison Faculty Handbook. They are offered to permit the teacher-to-be to explore many fundamental issues yet to be resolved in professional education. An example of these are:

> -- Describe the school organization. What advantages and disadvantages seem to exist in the staffing of Edison? What other kinds of school organizations are possible besides self-contained? What kind of classroom organization may be best in an inner-city school?
>
> -- React to the policy on purchase of unauthorized books How is the policy beneficial? limiting? Does it affect academic freedom?
>
> -- Many people believe the school building is part of the community and should be open to the community far beyond school hours. What are the advantages and disadvantages of a "lighted schoolhouse"? How do you feel about attending school and working "by the bell"? Could a school exist without school hours?[28]

In the following section is provided a brief description of the data available on the students in Pat Taylor's class.

Pat Taylor's Class- the Students

"The range of data available for each student in Pat Taylor's class extends from the jam-packed cumulative record folder containing a psychological report, a case study, test scores, discipline forms, and

correspondence to that almost empty folder listing little more than the family name and address."[29] In the course of the simulation the participants collate the resources available for each student and attempt to interpret the data in the light of each student's behavior.

In Figure 22 are provided thumbnail summaries for two of the children in Pat's class. The information for these summaries was extracted from the resource data that is available to the participants as found in each student's simulated record.

Examples of Some of the Incidents

As was illustrated in Figure 20, the problems or critical incidents in the laboratory sessions are presented to the participants in a variety of ways. In order for the reader to gain a better understanding of the ways these incidents are presented in the sessions, some of the incidents are described in "capsule form" on the following pages. The incident capsules, presented in Figure 23, list the material requirements, summarize the presentation, outline the procedures, and offer comments for consideration and discussion.

The Role of the Simulation Director

Cruickshank strongly recommends a non directive role for the simulation director in the use of ICSL. He states, "For the director, the point to be remembered is that the participant should have every chance to succeed or fail on his own".[30]

[1] ABRAMS, ELLEN (appears in Incidents 7, 11, and 24)

A. Cumulative record folder
1. Ellen lives with her mother and six siblings.
2. Teachers note that Ellen is "extremely sensitive and nervous and cries easily."
3. Enjoys art and sewing.
4. General ability scores of 104 and 116 indicate good academic potential.
5. Achievement somewhat lower than estimates of ability.

B. Sociometric data
1. Chosen by Marlene Homan, Emma Morgan, Sharon Stone.
2. Chooses Emma Morgan, Lynette Overmire, Sharon Stone.
3. Rejected by no one.
4. Rejects Mary Christian, Jan Morrisen, Debbie Walker.

N.B. Mutual choice with Emma Morgan, Sharon Stone.

C. Miscellaneous reports
1. Mother reported Ellen has weak kidneys and goes to the bathroom frequently.
2. During a parent conference in grade ~, Ellen's extreme nervous condition was discussed. Mother may be contributing to Ellen's condition by causing undue stress.

[2] BOLLING, ROBERT (appears in Incidents 1, 5, and 26)

A. Cumulative record folder
1. Robert lives with his working mother and five siblings.
2. Fifth-grade teacher indicates he is a "wanderer."
3. Participated in science fair.
4. Achievement average for his class.
5. General ability scores of 87 and 107. Standardized achievement tests were average for grade.

B. Sociometric data
1. Chosen by no one.
2. Chooses Donald Dunn, Bradley Livesay, Julio Rivera.
3. Rejected by Kim Carpenter, Barbara Monroe.
4. Rejects Kim Carpenter, Stanley Jones, Ronald Thurgood.

N.B. Mutual rejection with Kim Carpenter

C. Miscellaneous reports
1. Became a serious attendance and tardiness problem during fifth grade. Absent 35 days. Several truant officer reports in Robert's file.
2. Mother most unhappy about one of her younger children's having to attend College School because Edison is overcrowded. (See Truant Officer's Report dated 10/26.)

Fig. 22--Thumbnail summaries of two of the children in Pat Taylor's class. Source Cruickshank, on cit, p. 31.

INCIDENT 1 Phyllis Smith Asleep In Class

Problem statement: *Helping the child who comes to school without adequate food or sleep*
Method of presentation: *Movie*
Special material: *Film 1*
Audio script of Incident 1 (spirit master)

A few introductory remarks are necessary before showing the first filmed incident. Participants should be informed that Pat Taylor is not seen in any of the fourteen filmed incidents. In effect, the lens of the camera is the eye of Pat Taylor, and each participant sees the incident from that vantage point—as the teacher. Neither is Pat Taylor's voice heard. Rather, his or her words appear as subtitles on the screen. It is recommended that the audio script for the incident NOT be distributed until after the film is shown.

Synopsis. Incident 1 moves through several classroom events. As the incident opens, Pat observes a group of five children (Sharon Stone, Joe Moreno, Barbara Monroe, Kim Carpenter, Robert Bolling) engaged in planning a social studies project. Sharon Stone is the group chairman and attempts to break down the work to be done and to make assignments. The group, and especially Joe Moreno, react negatively to her. (This episode itself could serve as a vehicle for discussing problems associated with getting children to function effectively in small groups. The simulation director could use as a follow-up Critical Teaching Problem 12 of the TEACHING PROBLEMS LABORATORY along with the selected references relating to group processes found in the *Selected Reference Book* in that set of materials.)

When the bell rings, the class is asked to line up for gym (boys) and library (girls). As the students move toward the door, a certain amount of disorder occurs. (The problem, "Helping children to line up properly," was reported in the study undergirding the simulation and is a significant problem for inner-city teachers. This is a second problem shown in the film.)

The central problem is presented as Pat Taylor observes Marlene Homan trying to arouse Phyllis Smith, who has fallen asleep. Phyllis stirs as Pat moves toward her. The dialogue that follows reveals that on the night before, Phyllis and her siblings were home alone and watched the late movie. She neglected to set the alarm and overslept. A trip to the store for groceries went for naught, as Phyllis's brother lost the money. Running to school, the children still arrived late and hungry.

Procedures and Considerations. After the film is shown, each participant working independently records his reaction (as if he were Pat Taylor) to the incident by considering the Response Guidelines suggested in Section 2 of the *Data Book*. Additional or alternative questions may be used at the discretion of the director. The simulation director may wish to use the Alternate Incident Response Form contained in the book of spirit masters.

After independent study and problem solving, participants engage in small group discussion (3–5 persons). Recall that the function of this group is to permit each Pat Taylor in turn to suggest alternative courses of action. Other Pat Taylors are to react to each alternative, suggesting possible consequences of the teacher behavior on the child, family, class, teacher, school, or other. It is important that each participant begin to become aware of the personal values and attitudes underlying his behavior. These questions will need to be asked again and again. "Why do you suggest that alternative? What do you believe in? What logical or empirical evidence exists to support that teacher behavior?"

The Interaction Inventory found in the book of spirit masters may be used at the discretion of each participant at the conclusion of small group discussions. Remember that the responses on the inventory should be considered personal and confidential.

Finally the total group should explore the problems identified in the incident. At this juncture the most "acceptable" courses of action may be further explored and other fundamental issues identified.

It is urged that each participant begin to note anecdotal information about each child on the back of that child's cumulative record folder. The information will be cumulative because most children reappear in future incidents.

The participants may wish to keep records of their behavior. One way to do this is to document alternative actions one would employ followed by a personal statement of belief or support for that action. For example, a solution to Phyllis's sleepiness might be, "I would (really) confront Mrs. Smith and make it clear that she is not fulfilling her role as a mother." The statement of belief following might be, "I believe parents should be home at night with their children. They should awaken them in the morning and provide an adequate breakfast. I have high expectations of parenthood and cannot condone or accept a lower standard of parental behavior." A total and honest annotation of such feelings should be valuable in helping the preservice teacher decide whether his values are compatible with the values held by students, family, school, and so forth. In-service teachers using the same technique may become more aware of the reasons for success or lack of it as they work with disadvantaged children.

Fig. 23--Capsules of some of the critical incidents used in the Inner-City Simulation Laboratory. Source - Cruickshank, op cit, pp. 51-71.

INCIDENT 2 Sidney Sams Strikes Out

Problem statement: *Helping a child with social adjustment problems*
Method of presentation: *Movie*
Special materials: *Film 2*
Audio script of Incident 2 (spirit master)

Prior to the presentation of Incident 2, a classroom sociogram should be constructed. The information needed (choices and rejections) is in the *Data Book* on pages 156–159. Selected references on the construction and utilization of sociometric devices include:

Anastasi, A. A. *Psychological Testing*, pp. 540–42. 3d ed. New York: Macmillan, 1968.

Fox, R.; Luszki, M.; and Schmuck, R. *Diagnosing Classroom Learning Environments*, pp. 23–38. Chicago: Science Research Associates, 1966.

Gronlund, N. *Sociometry in the Classroom*, chap. 2. New York: Harper & Row, 1959.

Kerlinger, F. N. *Foundations of Behavioral Research*, pp. 554–63. New York: Holt, Rinehart & Winston, 1967.

Following construction of the sociograms and subsequent analysis, filmed Incident 2 can be shown.

Synopsis. Incident 2 begins in the faculty lounge, where Pat Taylor goes during a preparation period for a quick cup of coffee. Following casual conversation with two other teachers (Carol Schmidt and Sue Webster), Pat watches the boys choose sides for a baseball game. Pat goes to the playground to meet the boys who are having their physical education class. While waiting for the period to end, Pat observes and overhears teammates (Kim Carpenter, Craig Powers, Stanley Jones) ridiculing and taunting Sidney Sams, who, at a crucial time in the game, strikes out.

Comment. This is the first of several incidents (also 27 and 33) that depict Sidney as an isolated, rejected child. The sociograms constructed for this incident will be useful in establishing Sidney's peer group position and should be used for reference in solving other problems with other children in subsequent incidents.

Fig. 23 continued

INCIDENT 4 Hayward Clark's Fear of His Father

Problem statement: *Helping a child upset by some home condition*
Method of presentation: *Written incident*
Special material: *Incident 4 (spirit master)*

Incident 4 is the first incident presented in written form. The book of spirit masters contains the incident description and should be distributed to participants.

Synopsis. In Incident 4 Nancy Barnes, in a note to Pat Taylor, describes the very destructive home situation of the Clark family. In particular she relates the recent reprisal of Hayward against his father after he beat up the family. While his father was in the hospital, Hayward stayed out of school. Now that Mr. Clark is about to be discharged, Hayward returns to school. He refuses to go home, however, stating fearfully, "I'm not going home. My father's coming home from the hospital tonight, and he says he's going to kill me. . . ."

Comment. This incident is one that can be exploited as an example of the destructive home settings in which many inner-city children find themselves. The discussion could lead to an exploration of the family living in poverty. Here are a few references of particular interest:

Gill, David. "What Schools Can Do about Child Abuse." *American Education*, 5 (April 1969): 2–4.

Lewis, Oscar. *Five Families*, pp. 127–209. New York: Wiley, 1962.

Noar, Gertrude. *Teaching the Disadvantaged*, p. 12. What Research Says to the Teacher Series, no. 33. Washington: National Education Assn., 1967.

Parks, Gordon. "The Cycle of Despair: A Harlem Family." *Life*, March 8, 1968.

INCIDENT 6 Phyllis Smith's Hearing Problem

Problem statement: *Getting parents to take an interest in a child's health or appearance*
Method of presentation: *Playlet*
Special materials: *Incident 6 playlet (spirit master)*

Incident 6 engages participants in the first problem presented in the form of a playlet. Staging requires two actors—Mr. Utter, the principal, and Mary Martin, the teacher-nurse—who should familiarize themselves with the script in advance. Participants should be told that the problem concerns Phyllis Smith, whom they met earlier as the sleepy, hungry child in Incident 1. Those participants not taking roles will all be members of the faculty attending the staff meeting. At the conclusion of the playlet the faculty is asked to brainstorm and offer suggestions that might help Phyllis.

Synopsis. In Incident 6 a faculty meeting is held in which teacher-nurse Mary Martin and Mr. Utter solicit the help of the teachers in considering how to get parents to take an interest in their child's health problems.

Procedures and Considerations. Before anyone responds in the group setting, participants should be given an opportunity to work individually on the questions to accompany Incident 6.

Once the participants are ready, have Mr. Utter repeat his request and address it to one Pat Taylor. Perhaps you will want to elicit comments from several Pat Taylors, asking the group to analyze each one and compare approaches.

INCIDENT 7 Wesley Briggs Breaks Bradley Livesay's Watch

Problem statement: *Dealing with children who are destructive of others' property*
Method of presentation: *Movie*
Special materials: *Film 7*
Audio script of Incident 7 (spirit master)

Synopsis. In Incident 7 the class is experimenting with the period of the pendulum. Bradley Livesay and Wesley Briggs are the protagonists. Ellen Abrams, Sidney Sims, and Debbie Walker are in supporting roles. Some interplay occurs between the boys over Bradley's watch, which is being used by Debbie to keep time. Momentarily you give attention to Barbara Monroe, who needs a piece of string. While you are distracted, the boys engage in a scuffle over the watch, Bradley claiming that it was intentionally damaged. Wesley responds that Bradley has stolen the watch.

Comment. The incident provides the first opportunity to discuss destruction of personal property and fighting in the classroom.

Fig. 23 continued

In explaining his rationale for this type of role for the simulation director, he states

> "he nondirective point of view expressed above is in contrast to a dominant role in which the director would respond to the problems himself and reinforce participant response consistent with his knowledge, experience, and value system. If there were absolute answers or methods for solving each problem, then the director would be correct to use this strategy. Since prescriptive answers are not available, it is doubtful that any one person can serve as a model arbiter. In the absence of absolute answers and infallible directors, the course recommended for the simulation director is to provide each participant with complete freedom and responsibility for problem solving and allow the participant's decisions and values to be judged by his peers.31
>
> ....Although the director must be intimately familiar with the materials and their potential, he cannot be given a book to read or a treatise to follow which will make him sensitive and responsive to the individual and group needs and opportunities. Generally these abilities are a function of personality and experience. Consequently, the successful simulation will depend initially on the openness and understanding of the director[31]

He goes on to state that when the simulation director is asked to give his reaction to a problem, his response is not sacrosanct. He explains his rationale as follows.

> Ultimately the director will be asked to give his reaction to a problem. At this moment it will be apparent to the director that his response is not sacrosanct and that, in fact, the group probably has done pretty well in its analysis and dispositions of the problem.
>
> The director can also assist the group by having other professionals react to the group's strategies. For example, psychologists, sociologist, measurement specialists, administrators, nurses, subject-matter specialists, community action program personnel,

parents, and others might be invited to observe and critique a session or be available to answer questions from the participants.[32]

Cruickshank lists other suggestions to the simulation director. These include the following.

1. Know the laboratory materials initimately and how they can be used most effectively. It would be preferable for a director to have had an opportunity first to be a participant and to see the simulation from that vantage. Should several directors be in one college or school system, it would be well for them to go through several problems together as will the participants or to arrange a training session through Science Research Associates.

2. Establish some general objectives for the simulation. These might include:

   ----Having participants analyze their behaviors as Pat Taylor and list their dominant traits, characteristics, and values.

   ----Helping participants to see themselves as others do. Use of the Interaction Inventory would contribute to the attainment of this objective. (See section on evaluation.)

   ----Stretching participant response behavior; that is, getting them to consider and try out a greater variety of teacher strategies.

3. Establish behavioral outcomes for <u>each</u> incident.

4. Become familiar with resources that may strengthen your skills in leading groups or in handling particular kinds of incidents.

5. Help participants assume and understand their roles. It is essential that each participant accept and completely involve himself in the role of Pat Taylor. Although this may be difficult for a few at first, it is surprising how deeply involved most participants soon become.[33]

6. Ensure each Pat Taylor an opportunity to interact with every other Pat Taylor. Because one of the objectives of the program will probably be to expand participant behavior--that is, to encourage the participants to identify, accept, and employ a greater number of alternatives--it is strongly recommended that Pay Taylors work in new groups each day.

7. Write or have participants write and use other incidents they consider relevant.

8. Remind participants that the ICSL re-creates only the most severe, frequent problems of inner-city teachers.[34]

Cruickshank feels that it is unfortunate that happy satisfying incidents could not be interspersed throughout the program.

Problems of Evaluation

Concerning the assessment of the participants, Cruickshank explains

> Assessment obviously depends upon the instructor and the unique way the simulation is used for teacher preparation. The instructor must set the parameters for the behavioral changes to be attained.[35]

With the ICSL, Cruickshank feels, that it would be inappropriate for the author of the simulation to describe the objectives. He does, however, suggest a number of objectives for consideration. Below are examples of these suggested objectives.

As a result of the ICSL experience, participants will--

1. Describe more precisely the values of ethnic groups portrayed.

2. Describe, generally and specifically, the conditions existing in inner-city schools and neighborhoods which impede learning and teaching.

3. Differentiate between problems capable of solution within the present system of education and those which require major or minor overhaul of the system.

4. Differentiate the functions of a school board, superintendent, principal, and teacher. (Many similar content objectives can be derived from the "Questions to Accompany Filmstrips.")[36]

Another possible form of evaluation proposed is to compare the teacher behavior of each participant during simulation with a set of ideal behaviors. One such set of behaviors suggested for teachers working with the disadvantaged is provided by Mackie, Kvaraceus, and Williams.[37]

Cruickshank concludes his thoughts on assessment by stating

> .... In any case, since there are no valid predictors of teaching effectiveness, each simulation director must define his own or borrow from the work regarded as acceptable by professional educators.
>
> In considering the problems of evaluation, the crucial appraisal is the participants self-assessment. To help the participant in evaluating his actions and behavior, the "Interaction Inventory" has been included in the book of spirit masters. By using this instrument a participant can find out how he is perceived by his peers as he works through his problem solving.[38]

FOOTNOTES FOR PART I

Footnotes for Chapter I

1. Donald R. Cruickshank, and Frank W. Broadbent, Simulation in Preparing School Personnel. U. S. Department of Health, Education, and Welfare, Office of Education, Bureau of Research, Contract No. O.E.C.-0-080490-3706-(010) February, 1970, p. 34, ED 036-47C.

2. This definition combines Crawfords definition with an addition made by Cruickshank and Broadbent. Meredith P. Crawford. Simulation in Training and Education. Alexandria, Va.: Human Resources Research Office, 1967. p. 2, and Cruickshank and Broadbent, op. cit., p. 1.

3. Cruickshank and Broadbent, op. cit., p. 7.

4. P. J. Tansey, and Derick Unwin. Simulation and Gaming in Education. London: Methuen Educational Corp., 1969, p. 113.

5. Herbert LaGrone, A Proposal for the Revision of the Pre-Service Professional Programs of Teacher Education. Washington, D. C.: American Association of Colleges for Teacher Education, a department of the National Education Association, 1964, p. 63, as cited in Cruickshank and Broadbent, op. cit., p. 22.

6. Milton Martin, Maxine Dunfee and Edward Buffie. "Simulation-Focus on Decision Making for Elementary Education", Viewpoints: Bulletin of the School of Education Indiana University, 1970, pp. 6 & 7.

7. Bruce Mcquigg, "Simulation-Focus on Decision Making in Secondary Education." Viewpoints: Bulletin of the School of Education Indiana University, 1970, p. 53.

8. Cruickshank and Broadbent, op. cit., p. 7.

9. Tansey and Unwin, op. cit., pp. 111-112.

10. Cruickshank and Broadbent, op. cit., p. 7.

11. Ibid., p. 18.

12. Ibid., p. 7.

13. Edward Buffie, Doris Trojcak and Neal Winkler, "Project Simulation 1968-1970: Human Relations -- One Dimension of Teaching." Viewpoints: Bulletin of the School of Education Indiana University, 1970, p. 86.

14. Ibid., pp. 82-83.

15. Cruickshank and Broadbent, op. cit., pp. 9 & 10.

16. Ibid., p. 1 .

17. Ibid., p. 15.

18. Bert Y. Kersh, Classroom Simulation. U. S. Department of Health, Education, and Welfare, Office of Education, NDEA Title VII, Project 886. Washington, D. C.: Government Printing Office, 1963.

19. Kersh, op. cit., p. 7 as cited in Cruickshank and Broadbent, op. cit., p. 18.

20. Ibid., p. 20.

21. Bert Y. Kersh, "Simulation in Teacher Education." Paper presented at the American Psychological Association convention, St. Louis, 1962, p. 10., as cited in Cruickshank and Broadbent, op. cit., p. 18.

22. Cruickshank and Broadbent, op. cit., p. 19.

23. Ibid., p. 20.

24. Donald R. Cruickshank, Frank W. Broadbent, and Roy L. Bubb, Teaching Problems Laboratory. Chicago: Science Research Associates, 1967.

Footnotes for Chapter I continued

25. Tansey and Drick, op. cit., p. 122.

26. Cruickshank and Broadbent, op. cit., p. 19.

27. Donald R. Cruickshank, Inner-City Simulation Laboratory, Chicago: Science Research Associates, 1969.

28. Frederick Venditti, Handbook for Teaching in Valleybrook Elementary School: A Simulation for Learning about Problems of Racially Disadvantaged Schools. Knoxville: Equal Opportunities Planning Center, The University of Tennessee, n.d.

29. Cruickshank, op. cit., p. v.

30. Ibid.

31. Ibid., p. 2.

32. Ibid.

33. Ibid., p. 3.

34. Cruickshank and Broadbent, op. cit., p. 12.

35. Edward A. Swan and Jim Johnson, Simulation Exercises, DeKalb, Ill.: Creative Educational Materials, 1968.

36. Earl M. Hearn and Thomas L. Reddick, Simulated Behavioral Teaching Situations, Dubuque, Iowa: Wm. C. Brown, 1970.

37. Ibid., p. VII.

38. David L. Lehman, "Simulation in Science -- A Preliminary Report on the Use and Evaluation of Role Playing in the Preparation of Secondary School Student Teachers of Science." Paper presented at American Association for the Advancement of Science meeting, Washington D.C., December 1966, as cited in Cruickshank and Broadbent, op. cit., p. 13.

39. Robert N. Bush and Dwight Allen, "Micro-Teaching: Controlled Practice in the Training of Teachers." Paper presented at the Santa Barbara Conference on Teacher Education of the Ford Foundation, April 30, 1964.

40. Virginia Rogers, "Simulation in Preparing Social Studies Teachers," Social Education, Vol. 34, No. 2, March 1970, p. 337.

41. Ibid., pp. 338-339.

42. J. Utsey, C. Wallen, and H. O. Beldin, "Simulation: A Breakthrough in the Education of Reading Teachers." Phi Delta Kappan 47: 572-74; June 1966, as cited in Cruickshank and Broadbent, op. cit.,p. 14.

43. Cruickshank and Broadbent, op. cit., p. 16.

44. Ibid., p. 29.

45. Ibid., p. 3.

46. Ibid., p. 17.

47. Paul A.Twelker, Designing Simulation Systems, a paper presented at the annual meeting of the American Educational Research Education, Los Angeles, California, February 1969. Presently available in the ERIC system., ED 028964.

48. Cruickshank and Broadbent, op. cit., p. 21.

49. Ibid., p. 23.

50. Ibid.

51. Ibid., p. 24.

52. Cruickshank, op. cit., p. 18.

Footnotes for Chapter I continued

53. Cruickshank and Broadbent, op. cit., p. 24.

54. Paul Twelker, "Simulation: What Is It - Why Is It?" Paper presented at Association for Supervision and Curriculum Development Conference, San Diego, California, April 1968, p. 32; as cited in Ibid., p. 25.

55. Cruickshank and Broadbent, op. cit., p. 25.

56. Ibid., p. 29.

57. Cruickshank, op. cit., p. 20.

58. Ibid., pp. 26-27.

59. Ibid., p. 27.

60. Cruickshank and Broadbent, op. cit., p. 28.

61. Ibid., p. 29.

62. Ibid., pp. 30-32.

63. Ibid., p. 30.

64. Ibid.

65. Ibid.

66. Ibid.

67. Ibid.

68. Ibid., p. 31.

69. Ibid.

70. Ibid.

71. Donald R. Cruickshank and Frank W. Broadbent, "An Investigation To Determine Effects of Simulation Training on Student Teaching Behavior." Paper presented at American Educational Research Association convention, Los Angeles, February 1969, p. 12.

72. Ibid., p. 32.

73. Ibid., p. 33.

74. Ibid.

75. Ibid.

76. Ibid.

77. Ibid.

FOOTNOTES FOR PART II

Footnotes for Chapter II

1. Milton Marten, Maxine Dunfee and Edward Buffie. "Simulation-Focus on Decision Making for Elementary Education." Viewpoints: Bulletin of the School of Education, Indiana University, 1970, p. 3.

2. Ibid.

3. Ibid., p. 4.

4. The word "acroclinical", taken from "acro" (meaning "top" or "peak") and "clinical" (referring to direct contact) describes well the outstanding feature of the semester: the great amount of direct contact between prospective teacher and school children. Such actual experience, however, was related to professional study to maximize the benefits of both theory and practice, Ibid., p.5.

5. As cited in Marten, Dunfee and Buffie, op. cit., pp. 1-48 and 115-175.

6. The source for Figure 1 is Ibid., p. 116.

7. Each student must select an area of academic specialization preferably from the areas of language arts, mathematics, science or social studies. It is possible to substitute work in Special Education or Early Childhood Education to fulfill the requirements.

8. Marten, Dunfee and Buffie, op. cit., p. 118.

9. Ibid., p. 119.

10. Ibid.

11. Ibid., pp. 119-120.

12. Ibid., p. 20.

13. Ibid., p. 120.

14. The source for Figure 2 is Ibid., p. 127.

15. Ibid., p. 120.

16. Arthur H. Rice, "Insite: Partnership in Learning for Teacher Education." Bulletin of the School of Education Indiana University. 1969, p. 52.

17. Ibid.

18. Ibid., p. 53.

19. Rice, op. cit., p. 53.

20. The source for Figure 3 is Marten, Dunfee and Buffie, op. cit., p. 128

21. Ibid., p. 5.

22. Ibid.

23. Ibid., p. 6.

24. Ibid.

25. Ibid.

26. Ibid.

27. Ibid., p. 7.

28. Many materials were gathered in order to implement the simulation project: color slides, audio-slide sets, films, audio tapes, children's work, and various data. This material, collected in Griffith, Indiana, consisted of films of the community itself, of the schools, of specific classrooms; data concerning pupils, teachers, and administrators; and samples of daily work produced by the pupils, Ibid., p. 7.

29. Ibid.

30. Ibid.

31. Ibid., p. 9.

32. Ibid., p. 10.

33. Ibid., p. 11.

34. Ibid.

Footnotes for Chapter II continued

35. Ibid.

36. Ibid., p. 13.

37. Ibid.

38. Ibid., p. 14.

39. Ibid.

40. Ibid.

41. Ibid., p. 16 and 17.

42. Ibid. p. 18.

43. The source for Figure 9 is Ibid., p. 131.

44. Ibid., p. 27.

45. Ibid.

46. Ibid., p. 29.

47. Ibid.

48. Ibid., p. 31.

49. The source for Figure 10 is Ibid., pp. 133-134.

50. Ibid., p. 32.

51. Ibid., p. 30.

52. Ibid., p. 32.

53. Ibid.

54. Ibid., p. 33.

55. Ibid., pp. 34-35.

56. Ibid., p. 35.

57. Ibid., pp. 35-36.

58. The source for Figure 12 is Ibid., pp. 135-136.

59. Ibid., p. 34.

60. Ibid., pp. 36-37.

61. Ibid., p. 37.

62. Ibid., p. 39.

63. Ibid., p. 35.

64. Ibid. p. 38.

65. The description of these phases taken from Rice, op. cit., pp. 71 and 72.

66. Ibid., p. 71.

67. Ibid.

68. Ibid., p. 22.

69. Ibid., p. 72.

70. Bruce Mequigg, "Simulation-Focus on Decision Making in Secondary Education" Viewpoints: Bulletin of the School of Education, Indiana University, 1970, p. 56.

71. Ibid., p. 57.

72. Ibid., p. 58.

73. Ibid.

74. Ibid.

75. Ibid., p. 60.

76. Ibid., p. 61.

77. The source for cases 3, 4, and 6 is Ibid., pp. 62-65.

78. Ibid., p. 69.

79. Ibid., p. 75.

80. Ibid., p. 81.

81. Ibid., p. 82.

Footnotes for Chapter II continued

82. Ibid., p. 83.

83. Ibid., p. 85.

84. Ibid., p. 94.

85. Ibid., p. 98.

86. Ibid., p. 99.

87. Ibid., p. 100.

88. Ibid., p. 107.

89. Ibid.

90. Ibid., p. 108.

91. Ibid., p. 109.

92. Ibid.

93. Ibid., pp. 109-110.

94. Ibid., p. 110.

95. Ibid.

96. Ibid.

97. Marten, Dunfee, and Buffie, op. cit., p. 43.

98. Ibid.

99. Ibid., p. 43

100. Ibid.

101. Ibid., p. 44.

102. Ibid., p. 45.

103. Ibid., p. 46.

104. Ibid.

105. Ibid., p. 47.

106. Ibid.

Footnotes for Chapter III

1. Paul A. Twelker, Development of Low Cost Instructional Simulation Materials for Teacher Education. Final Report U.S. Department of Health, Education, and Welfare, Office of Education, Bureau of Research. Contract No. CEC-6-10-277 July 1970, p. B-1.

2. Ibid.

3. Ibid., p. 2.

4. Ibid.

5. Ibid., p. 448.

6. Ibid.

7. Ibid.

8. Twelker op. cit., p. 3.

9. Bert Y. Kersh, Classroom Simulation: A New Dimension In Teacher Education: final report Monmouth: Teaching Research, Oregon State System of Higher Education, June 1963, (U. S. Office of Education, Title VII, Project No. 886, Grant #7-47-0000-164). Bert Y. Kersh, Classroom Simulation: Further studies On the Dimensions of Realism, paper presented at the American Education Research Association, Chicago, February 19, 1966. Monmouth: Teaching Research, Oregon State System of Higher Education. Bert Y. Kersh, Classroom Simulation: Further Studies on the Dimensions of Realism: Final Report Monmouth: Teaching Research, Oregon State System of Higher Education, December 1965 (Title VII, Project #5-0848.)

10. Twelker, op. cit., p. B-1.

11. Ibid.

12. Ibid., p. B-3.

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